DAPC Permitting Manual
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March 2002

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Article Prohibiting Use of Waste Oil for Dust Control, DAPC Air Lines, March 12, 1992

Note: This document includes the readily available Ohio guidance items, as well as some federal guidance. There may be additional items that have been created over the years, which do not appear here. Please notify DAPC of any missing items, so they may be reviewed for inclusion.

From: Bob Hodanbosi
To: Tom Tucker
Date: 12/17/99 8:34AM
Subject: Re: Is Silica an Air Toxic?

Tom,
No. This question has been raised in the past and we have not used the toxic policy for the review of silica.

Bob

>>> Tom Tucker 12/17/99 07:55AM >>>

Under what circumstances would we require an Air Toxics evaluation for the effects of crystalline silica (sand) emissions from a casting plant?

Silica is not a listed 112(b) HAP, but it does have a TLV and is identified by some sources as a human carcinogen. The TLV are for the respirable fraction (roughly PM2.5) and range from 0.05 to 0.1 mg/m3, depending on crystal composition.

Dana is currently reviewing the GM Power Train PSD modeling report.

Thank you. JTT

CC: Dana Thompson ; Mike Hopkins ; Misty Parsons ; Paul Koval ; Safaa ElOraby

Ohio EPA Inter-Office Communication

Division of Air Pollution Control

To: DO Air Unit Supervisors & LAA Directors **Date:** 4/19/94

From: Bob Hodanbosi, Chief, DAPC

Subject: Review of New Sources of Air Toxic Emissions Policy

I have received a request from Director Schregardus' Office to clarify the role of the most recently proposed (January 1994) "Review of New Sources of Air Toxic Emissions" draft document. The Director's Office has received notification that some DOs and LAAs are requiring PTI applicants to comply with the Proposed 1994 air toxics policy. This is not the correct use of the proposed policy. The older "Option A" policy is the policy currently in effect for PTI applications, which requires the modeling for toxic air contaminants be below the TLV/42 (MAGLC = Maximum Allowable Ground Level Concentration). The proposed Policy includes a MAGLC of TLV/100, plus a risk assessment be conducted for sources of carcinogenic air contaminants.

The 1994 Policy has been released for its third and final public comment period in January 1994. We have received, and are in the process of responding to, many comments on the Policy. When the response to comments is completed by Ohio EPA, the Policy will be issued as the official policy to use for new PTI applications for air pollution sources in Ohio. We anticipate the Policy to be placed into use in May 1994.

Until the release of the final Policy as modified by the most recent public comment period, Ohio EPA DO's are to use the original "Option A" policy for sources of toxic air pollutants.

Some LAAs may have local authority to require additional stipulations in the PTI. These LAAs may be using the proposed Policy as their LAA's determination of BAT for toxic air contaminants. This is the result of local pollution control laws and not the Ohio EPA DAPC.

If you have any additional comments or questions on the proposed Policy please call Paul Koval, Supervisor of the Air Toxics Unit for DAPC at (614)644-2270. Thank you.

cc: District Office Air Unit Supervisors
Local Air Agency Directors

Lynn Malcolm, Akron
Cory Chadwick, DES AQP (Cinn)
John Paul, RAPCA
Don Walden, Portsmouth
Bob Ramhoff, Mahoning-Trumbull
Bruce Blankenship, Canton
Robert Staib, Cleveland
Leon Weitzel, Lake County
Pat Deluca, NOVAA
Lee Pfouts, TESA

Don Cavote, CDO
Fred Klingelhafer, SEDO
Dennis Bush, NEDO
Gerald Rich, NWDO
Phil Hinrichs, SWDO

INTER OFFICE COMMUNICATION

RECEIVED
JUN 29 1993
NOVAA
STEUBENVILLE, OHIO 43952

DATE: June 25, 1993

TO: District Offices and Local Air Agencies

FROM: Alan Lloyd - Ohio EPA, DAPC - Permits

SUBJECT: Ceramic tile manufacturers - FYI

Recently, The Division of Air Pollution Control of the Ohio EPA reviewed two Permit to Install (PTI) applications for kilns that manufacture ceramic tile that emit SO_2 and fluoride emissions.

Both of these sources were not permitted for SO_2 and/or fluoride emissions, but did provide documentation in their PTI applications that they did emit SO_2 and fluoride emissions.

Up until the review of these permits and based on information found in AP-42, section 8.3, emission factors for the manufacturer of bricks and related clay products, which indicated that SO_2 may be emitted from the bricks when the temperatures reach or exceed 2500°F and the fluorides, largely in gaseous form, are emitted from brick manufacturing operations, we did have any data or indication that these sources emitted SO_2 and/or fluoride emissions.

In addition, based on our belief that these facilities did not emit SO_2 emissions, these sources were not included in the State's SO2 State Implementation Plan (SIP).

Therefore, to accounted for these emissions, Ohio EPA is requesting that the district offices and local air agencies investigate the possibility that SO_2 and/or fluoride emissions are, in fact, being emitted by these facilities. Depending on the results of your investigation, you may need to request that the facilities apply for and obtain PTI's and/or PTO's.

If a new PTI and/or a new PTO is required and depending on the amount of SO_2 and/or fluoride emissions that are emitted, then a number of scenarios would be invoked. An example of one possible scenario would be the following:

If the calculated allowables for SO_2 and fluoride emissions are above 25 and 3 tons per year, respectively, for a permit, then air dispersion modeling would be required per Bob Hodanbosi's memo of January 31, 1989. This would require the facilities to meet a maximum 24-hour ground level concentration of 45 micrograms/m^3 for SO_2 and a maximum 30 day average ground level concentration of .5 micrograms/m^3 for fluorides. If you have questions, call me.

OhioEPA
State of Ohio Environmental Protection Agency

O. Box 1049, 1800 WaterMark Dr.
olumbus, Ohio 43266-0149
(614) 644-3020
FAX (614) 644-2329

George V. Voinovich
Governor

M E M O R A N D U M

To: All Ohio EPA DAPC District Field Offices and Local Air Authorities

From: Bob Hodanbosi - Manager, AQM&P

Subject: Air Toxics Modeling of New Sources

Date: August 13, 1991

All new sources generating greater than one ton per year of an air toxic chemical must include air toxics modeling in their permit to install (PTI) review. If your office runs the screen model on a permit, please include the computer output with the PTI application worksheets. If your office cannot run the screen model, please submit the new source review coding forms so that the model can be run here at central office. Inclusion of this information will help to expedite processing of your permits. The U.S. EPA requires that we keep records of all air toxics modeling.

Although it is not required, it may be helpful to model sources emitting less than one ton per year of chromium, nickel, and other chemicals having TLV's of less than or equal to 50 um/m3. We have found that some modeling parameters can cause sources emitting less than 1 ton per year of these types of chemicals exceed the MAGLC (current air toxics policy).

BH/SJS/mmc

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Ohio EPA

Division of Air Pollution Control

Engineering Guide # 70

DRAFT

Question:

What is the Ohio EPA's current "Air Toxic Policy" for processing Permit-to-Install (PTI) applications?

Answer:

Ohio EPA's current "Air Toxic Policy" is entitled "Option A - Review of New Sources of Air Toxic Emissions" (issued May 1986). Page 4 of this guideline is a one-page table that summarizes the current "Air Toxic Policy" as established by "Option A" with the interpretations made by the Ohio EPA since the original policy was issued. A copy of "Option A" is attached to this Engineering Guide for reference. Also attached is a copy of the January 31, 1989 inter-office communication (memorandum) from Bob Hodanbosi that establishes a 1.0 ton per year cut-off for "Air Toxic Policy" evaluations.

Discussion:

A number of questions have been raised by agency staff related to the proper interpretation and use of the current "Air Toxic Policy" (i.e., "Option A"). The following questions/answers provide further guidance to staff involved with the implementation of this policy.

Question 1: The Ohio EPA has issued several draft updates to the Ohio EPA's "Air Toxic Policy". The drafts contain numerous updates including an evaluation for carcinogenicity and a tighter Maximum Acceptable Ground Level Concentration (MAGLC). Does Ohio EPA consider compliance with any of the draft policies necessary to meet BAT?

Answer: Compliance with the current "Air Toxic Policy" (i.e., "Option A") is sufficient to demonstrate BAT for emissions of toxic air contaminants. (Note: Enforceable local requirements may be used by Local Air Agencies to establish a standard more stringent than the TLV/42.)

Question 2: If a new Maximum Achievable Control Technology (MACT) standard applies to a proposed new source or modified existing source, does this source also need to meet the "Air Toxic Policy" (i.e., "Option A")?

Answer: No. Compliance with the MACT standard is sufficient to meet the Ohio EPA's "Air Toxic Policy" and BAT requirements. This is also the case for emissions that are controlled by any other national standard. For example, if PSD applies and the pollutant in question complies with the limits/modeling under PSD, then the "Air Toxic Policy" does not apply for that pollutant. MACT, NSPS, NESHAPS, PSD, or major New Source Review are areas where the "Air Toxic Policy" does not apply because of a pre-existing national standard.

POLLUTANT BY POLLUTANT EVALUATION

DRAFT

Question 3: What about emissions of a highly toxic compound (e.g., a known human carcinogen) where the agency determines the "Air Toxic Policy" is not sufficient to protect public health? Is compliance with the "Air Toxic Policy" sufficient to meet BAT requirements in this case?

Answer: No. The "Air Toxic Policy" is not necessarily sufficient. Highly toxic compounds can be evaluated on a case-by-case basis and limitations established to ensure that public health is protected. Please contact the AQM&P Section for assistance in evaluating these situations.

Question 4: A new source is being installed at an existing facility. Do the emissions from the existing sources at the facility need to be included in the model evaluation?

Answer: No. Only emissions from the proposed new source or modification must be evaluated.

Question 5: An existing source is being modified such that it needs a permit to install. The emissions of an air toxic are being increased. Does the "Air Toxic Policy" require that the total emissions after the modification be evaluated? Or, does the "Air Toxic Policy" only require that the incremental increase in emissions be evaluated?

Answer: Only the increase in toxic emissions due to the change must be evaluated (i.e., the net difference between the new allowable and the old allowable for the air toxic).

Question 7: Are only gaseous/vapor VOC type pollutants reviewed under the "Air Toxic Policy" or are some particulates such as toxic metals reviewed?

Answer: Any pollutant for which the American Conference of Governmental Industrial Hygienists (ACGIH) has adopted a TLV or a Ceiling Value must be reviewed. (Note: As indicated in the response to Question 2, pollutants that are regulated under a MACT, NSPS, NESHAPS, PSD, or Major New Source Review are excluded.)

Question 8: There are many "air toxic" lists. Which one do we use for the "Air Toxic Policy"?

Answer: The most recently published Threshold Limit Values (TLV) listing should be used ("Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices", American Conference of Governmental Industrial Hygienists).

Question 9: Are there certain types of emissions units that do not need to be modeled under the "Air Toxic Policy"(for example, do the emissions from a Gasoline Dispensing Facility (GDF) require modeling)?

Answer: Every emissions unit with one ton per year or more of the emissions of any air toxic must be modeled unless an acceptable alternative demonstration is made (the one ton cut-off was established in a memorandum from Bob Hodanbosi dated January 31, 1989). An acceptable alternative demonstration includes modeling associated with an identical emissions unit with comparable site characteristics.

DRAFT

Question 10: Does the "Air Toxic Policy" require and evaluation of each specific air toxic constituent of a VOC coating to determine if the one ton per year cut-off is exceeded?

Answer: Yes. Any source that emits one ton per year or more of any air toxic must be evaluated under the "Air Toxic Policy".

Question 11: Do air toxic emissions from combustion sources have to be evaluated?

Answer: No. Most combustion sources do not need to be evaluated for air toxics at this time. These include boilers and heaters that burn fossil fuels exclusively (coal, natural gas, fuel oil, etc.). These sources are already well regulated under existing rules. Exceptions to this are for combustion sources that emit an air toxic from something other than the combustion of the fossil fuels. Some examples of this include incinerators where air toxics are generated from the burning of the waste stream, and boilers where waste fuel or tires are burned along with the fossil fuel. These types of sources should be evaluated under the "Air Toxic Policy".

DRAFT

Ohio EPA - Division of Air Pollution Control
"Air Toxic Policy"
Summary

DRAFT

Element	Ohio EPA's Current Policy
PTI applications that require an "Air Toxic Policy" analysis	All **new emissions units** and all **modifications of emissions units** that *involve emissions increases of ≥1 ton per year of any air contaminant for which the ACGIH has adopted a Threshold Limit Value (TLV) or Ceiling Value.* (Note: Multiply a 10-min average Ceiling Value by 0.737 to derive an 8-hr TLV.)
Contaminants that require analysis	All contaminants with an ACGIH TLV *in effect at the time the application is received.*
Exemptions	**Emission units subject to a MACT standard are exempt.** **Emissions that are restricted by another federal standard** are also excluded from the analysis (i.e., NSPS, BACT, LAER or NESHAPS) (Note: This includes VOC species that are controlled by an overriding VOC emissions standard).
Amount of emissions that must be evaluated	*The amount of the emissions increase requested in the PTI application* (unless a previous PTI included a provision that requires future increases to be evaluated in conjunction with previous authorized emissions).
Maximum acceptable ground level concentration (MAGLC)	TLV adjusted for exposure to the general public and the duration of the exposure. **Maximum:** TLV/10 (for operations ≤40 hours per week operation) **Intermittent:** (TLV/10) x (8/actual daily operating hours) x (5/actual operating days per week) **Minimum:** TLV/42 (for continuous operations.)
Averaging time for MAGLC comparison	*One-hour average* concentration. (The MAGLC specified as a 1-hour average concentration versus the maximum predicted 1-hour concentration at the maximum hourly emission rate.)
Methodology for MAGLC analysis	*SCREEN3 or other US EPA approved model* (model using the maximum 1-hour emission rate to predict the maximum off-site concentration).
	(Note: The distance to the nearest property line can be used in this analysis.) as the minimum distance
Synergistic effects for MAGLC contaminants	*Not required,* each contaminant is evaluated independently.
Class A, B and C Carcinogens	The current "Air Toxic Policy" does not include any special provisions for Class A. B or C carcinogens. Extremely toxic contaminants and/or carcinogens should be evaluated independent of the "Air Toxic Policy".

only or a starting point?

DRAFT

OPTION A

REVIEW OF NEW SOURCES

OF AIR TOXIC EMISSIONS

Ohio Environmental Protection Agency
Division of Air Pollution Control
1800 WaterMark Drive
Columbus, Ohio 43215

inter-office communicatior

to: Distribution date: May, 1986

from: Bob Hodambosi, DAPC

subject: New Source Review Handbook: Guideline for Air Toxics

Ohio EPA is working to develop a policy for toxic air pollutants. Three (3) draft policies have been developed - Options A, B and C.

Until this policy is finalized, Option A (attached) will be used as the guideline for air toxics.

If you have any questions, please do not hesitate to contact me at (614) 466-6116.

BH/jlc

Attachment

GEN 1001 (3/84)

OPTION A

REVIEW OF NEW SOURCES

OF AIR TOXIC EMISSIONS

Ohio Environmental Protection Agency
Division of Air Pollution Control
1800 WaterMark Drive
Columbus, Ohio 43215

REVIEW OF NEW SOURCES OF TOXIC EMISSIONS

Synopsis

The following is a summary of the Ohio Environmental Protection Agency (EPA) policy for the control of toxic air emissions.

1. Determine if a threshold limit value (TLV) exists for the specific compound which is emitted from the source.

2. Divide the TLV by ten to adjust the standard from the working population to the general public (TLV/10).

3. Adjust the standard to account for the duration of the exposure (operating hours of the source) of "X" hours per day and "Y" days per week from 8 hours per day and 5 days per week. This formula is used to obtain the Maximum Acceptable Ground-Level Concentration (MAGLC).

$$\left(\left(\frac{TLV}{10} \times \frac{8}{X} \times \frac{5}{Y}\right)\right) = 4\frac{TLV}{XY} = \text{MAGLC}$$

4. The Director may, on a case-by-case basis, accept an alternate analysis from a new source applicant.

Introduction

The basis for the air program's activities have been based upon the ambient air quality standards for "criteria pollutants." These standards, designed to protect health and welfare, have been established by U.S. EPA for the following six (6) pollutants:

1. Total suspended particulates,
2. Sulfur dioxide,
3. Carbon monoxide,
4. Nitrogen dioxide,
5. Ozone, and
6. Lead (Pb).

Emission limitations for new and existing sources have been established under the federal National Emission Standards for Hazardous Air Pollutants (NESHAPs) for the following pollutants:

1. Vinyl chloride,
2. Asbestos,
3. Beryllium,
4. Mercury,
5. Benzene, and
6. Arsenic (proposed).

The federal New Source Performance Standards (NSPS) also address several additional pollutants which are:

1. Fluorides,
2. Sulfuric acid mist,

3. Hydrogen sulfide, and

4. Reduced sulfur compounds.

For new sources, the Permit to Install rules require the application of Best Available Technology, and emissions of non-specified contaminants can be controlled through this mechanism. However, this level of review may not be adequate for toxic emissions. U.S. EPA has been slow to promulgate NESHAPs for additional pollutants. In order to assist in the review of new sources of toxic contaminants, the following policy has been developed by the Air Quality Modeling and Planning Section of the Division of Air Pollution Control.

Background and Rationale

The American Conference of Governmental Industrial Hygienists (ACGIH) has been involved with the safety aspects of work places where individuals may be exposed to varying levels of toxic substances. The ACGIH publishes and continuously updates a list of "Threshold Limit Values" (TLVs) for many substances. These TLVs represent maximum concentrations under which it is believed that nearly all workers may be repeatedly exposed, day after day, without adverse effects. Most of the TLVs refer to time-weighted average concentrations for a normal work day, with certain excursions within limits permissible during that time period, as long as the weighted average is not exceeded. However, for certain substances, there are levels that should not be exceeded at any time.

As outlined below, there are certain limitations and dangers in the literal application of TLVs for air pollution control purposes.

1. Threshold Limit Values are based on the information gathered in industrial/commercial settings, through experience from medical research and practice, from experimental human and animal studies, and also from a combination of these sources. Only in a few instances have the values been established firmly on a basis of examinations of human subjects correlated with extensive environmental observations.

2. The TLVs were determined for a population of workers who are essentially healthy and who fall within a "working age group" of about 17 to 65 years.

3. Synergistic effects of mixtures of substances are not considered in the development of TLVs, although the TLVs for mixtures can be calculated via the appropriate formula.

4. Individuals vary in sensitivity or susceptibility to toxic substances.

5. Often a single value is given for substances which occur in different forms and may have different toxicities.

6. For most contaminants, a worker during a normal work schedule (8 hours per day, 5 days per week) receives 40 hours of exposure per week with daily and weekend periods in which the body may rid itself of the accumulated substances before toxic levels are reached. For a person living continuously in an environment containing such substances, however, these recovery periods do not exist. Exposure to TLV levels may, therefore, subject the person to an unacceptably high risk of injury.

In setting ambient goals for toxic substances, two time periods must be considered.

1. Duration of Exposure - This is the amount of time a person spends in contact with a toxic substance. (In this application, it is assumed that a person may continuously be exposed to the specific contaminants during the operating hours of a source.)

2. Averaging Time - This time period is used to measure compliance with the standard.

For example, the OSHA TLVs have a maximum allowable duration of exposure of 8 hours/day and 40 hours/week, but an averaging time of 8 hours for determining compliance with the rules. Similarly, the ambient lead standard has a continuous duration of exposure, but a quarterly averaging time for determining compliance. Also, the ACGIH publishes acceptable ceiling concentration values within an 8-hour

workday, and acceptable maximum peak concentrations for a short period of time, in addition to the time-weighed 8-hour weekday.

Determination of Maximum Acceptable Ground-Level Concentration (MAGLC)

Taking into account the duration of exposure and averaging time, the following stepwise procedure should be used to determine the allowable ambient air concentration for a toxic substance:

1. Determine if a TLV exists for the specific compound which is emitted from the source.

2. Divide the TLV by ten (10) to adjust the standard from the working population to the general public (TLV/10).

3. Adjust the standard to account for the duration of the exposure (operating hours of the source) of "X" hours per day and "Y" days per week from 8 hours per day and 5 days per week.

$$\left(\frac{TLV}{10} \times \frac{8}{X} \times \frac{5}{Y}\right) = 4\,\frac{TLV}{XY}$$

4. The TLVs are based on an averaging time of 8 hours per day. The standard method of determining the ambient air quality effect of the source is through dispersion modeling. The most readily adaptable averaging time for dispersion models is generally one hour. The approvability of a source will be based on the

predicted one-hour averaging time (under worst-case meteorology) in comparison to the MAGLC obtained from Step 3. If the impact of the source is greater than the MAGLC, additional measures by the source will be necessary before the Permit to Install can be issued. Because no adjustment is made to the formula in Step 3, an additional safety factor of approximately 30% is produced (see Appendix A for the derivation of the 30% safety factor).

$$\text{MAGLC} = \frac{4\ \text{TLV}}{XY}$$

By using a factor of 10 in Step 2 and by decreasing the averaging time in Step 3, the TLV has been adjusted for the greater susceptibility of the general population in comparison to healthy workers.

The 8/X and the 5/Y multipliers in Step 3 are used to relate the exposure to longer than 40-hour time periods and ascertain that the individual's total exposure will be no greater than that allowed by the TLV.

For less than 40 hours per week of plant operation, the MAGLC formula will yield a value greater than the TLV/10. Although excursions of up to three times the TLV can be calculated in some cases, it does not appear reasonable to permit this situation for the general population. A condition on the formula is,

therefore, necessary to limit the allowable concentration to TLV/10 for operating times less than 40 hours per week.

Thus, from the above analysis, the derivation of the maximum acceptable ground-level concentration (maximum one hour average) beyond the plant boundary of a continuous emitting source would be:

$$\text{MAGLC} = \frac{\text{TLV}}{10} \times \frac{8 \text{ hours}}{24 \text{ hours}} \times \frac{5 \text{ days}}{7 \text{ days}} = \frac{\text{TLV}}{42}$$

An example of this procedure is contained in Appendix B.

The application of the policy is for use as a guideline in the review of new source applications. There may be cases where the TLV values are inappropriate for this type of application. The Director may consider, on a case-by-case basis, other data in the determination of a Maximum Acceptable Ground-Level Concentration from a new source.

Comparisons of MAGLC to National Ambient Air Quality Standards Values

In order to determine the relative stringency of this procedure, a comparison was made using this method with the National Ambient Air Quality Standards (NAAQS) for sulfur dioxide and ozone, and with the NESHAP for beryllium:

A. Sulfur Dioxide

For a continuously emitting sulfur dioxide source, the acceptable one-hour ground-level concentration would be:

$$MAGLC = \frac{(4)(TLV)}{(X)(Y)} = \frac{(4)(5\ ppm)}{(24\ hr/day)(7\ days/week)} = 0.12\ ppm$$

Under the NAAQS, the three-hour standard is 0.5 ppm, not to be exceeded more than once per year.

B. Ozone

For an intermittent ozone source operating three hours per day, five days per week, the allowable impact would be:

$$MAGLC = \frac{(TLV)}{(10)} = \frac{.1\ ppm}{10} = 0.01\ ppm$$

The NAAQS for ozone is 0.12 ppm one-hour average, not to be exceeded more than once per year over a three-year period.

APPENDIX A

The vertical (σ_z) and horizontal (σ_y) dispersion parameters utilized in most gaussian models were developed by Pasquill[1] and modified by Gifford[2]. Although the original experiments were based on a ten-minute sampling time, in practice, σ_y and σ_z values are considered to represent dispersion for a one-hour average. Due to wind direction fluctuations and variations in wind speed, it is necessary to adjust predictions which are greater than one-hour to account for these meteorological phenomena. To apply the predictions to longer than a one-hour period, the following equation is suggested by Turner[3]:

$$X_s = X_k \frac{(t_k)}{(t_s)}^p$$

Where

X_s is the concentration predicted over an averaging time t_s,

X_k is the concentration predicted over an averaging time t_k, and

p is a constant and should be between 0.17 and 0.2.

---

[1] F. Pasquill, "The estimation of the dispersion of windborne material," Meteorological Magazine, Vol. 90, 1961, pp. 33-49.

[2] F.A. Gifford, "Use of routine meteological observations for estimating atmospheric diffusion," Nuclear Safety, Vol. 2, 1961 p. 47.

[3] D.B. Turner, "Workbook of Atmospheric Dispersion Estimates," Office of Air Programs Publication, No. AP-26, U.S. EPA, Research Triangle Park, North Carolina, 1970.

As shown below, applying this equation to the case of estimating an eight-hour average concentration, the one-hour predicted concentration should be reduced by 32%.

$$X_s = \frac{(t_k)}{(t_s)}^p$$

$$\frac{X_s}{X_k} = \frac{(1)}{(8)}\ 0.185$$

$$\frac{X_s}{X_k} = 0.680$$

By not allowing for this adjustment when reducing the averaging time from eight-hours to one-hour in step 4, an aditional safety factor of 32% is realized.

APPENDIX B

A new hazardous waste incinerator is proposing to burn sludge containing cadmium. The incinerator is equipped with a wet scrubber which is designed to remove 98% of the cadmium in the waste gas stream and will emit 4.6 pounds per hour of cadmium. The incinerator will operate 24 hours per day, 7 days per week.

The TLV for cadmium is 0.1 mg/m^3, and from Step 4, the maximum allowable ground-level concentration would be:

$$MAGLC = \frac{4(TLV)}{(X)(Y)} = \frac{(4)(0.05\ mg/m^3)}{(24\ hrs/day)(7\ days/week)} = 1.19 \times 10^{-3}\ mg/m^3$$

$$= 1.19 \times 10^{-6}\ g/m^3$$

From the PTMAX model, the maximum one-hour impact from the source is predicted to be 6.24×10^{-6} at 0.5 m/sec wind speed and F stability.

Since the predicted concentration is greater than the MAGLC of 1.19×10^{-6} g/m^3, the source will be required to develop a plan to reduce the ambient impact of the cadmium emissions.

OEPA inter-office communication

to: DISTRIBUTION date: December 22, 1999

from: Mike Hopkins, Manager, AQM&P Section

subject: New Preliminary Application Completeness Review Process Guidance

A small group of Central Office and District/LAA staff, the Application Completeness Review (ACR) Team, was formed to develop a mandatory, preliminary application completeness review procedure to be used statewide, **beginning with applications received on January 1, 2000.**

There are several reasons why this review and system is needed. The Ohio Revised Code requires the PTI program to track progress and prepare reports which deal with timeliness issues. The Ohio Administrative Code also requires that we have a completeness review program. In addition, the new PTI computer tracking program will include a field for the completeness check, which must be completed by the reviewer. Therefore, a standard system is needed statewide.

We earlier surveyed all DO/LAAs for suggestions, and reviewed the information returned. The final system is a revision of the original CDO system/checklists, and is similar to that currently used by some field offices. Therefore, we hope it won't be too much of an adjustment to begin using this system.

The initial or preliminary completeness review, as we have termed it, should be conducted <u>within 7 business days</u> of receipt of a PTI application. This is not an in depth or technical completeness review. It is primarily a check to determine whether all the items on the application forms have been completed, and whether the application is signed. However, it will also be a review to find any basic errors or items that need corrected on the application and EAC forms. This review can be done by the PTI writer or someone else (supervisor/clerical), and it is being left up to each office to decide who will conduct the review.

There is a letter to send to the applicant for when the application is incomplete, as well as one to use when it has been found to be preliminarily complete. Checklists are being provided to help prompt the reviewer to focus on key elements, as well as to show the deficiencies to the applicant. This form will be sent along with the incomplete letter and a copy will be placed in the file. This process is intended to be "customer friendly" which is one reason that the reviewers name, as well as an estimate of when the field office review will be finished, has been included in the letter. The letters also stress that this is only a preliminary determination, and not a full or technical determination of completeness, and advise that construction cannot commence.

As offices use the system, it may become necessary to make revisions, which is fine. This is not necessarily a final product. We had hoped to get this information to you sooner to allow you as much time as possible before the new year, however we need to begin using it in January. If you have any questions or comments on the system please contact me. Thank you.

DISTRIBUTION (with attachments)
Isaac Robinson, Cesar Zapata, Mike Riggleman, CDO
Fred Klingelhafer, Glen Greenwood, SEDO
Dennis Bush, John Curtin, NEDO
Don Waltermeyer, Samir Araj, NWDO
Phil Hinrichs, Pam Smith, SWDO
Dale Aleman, Daniel Schiltz, Canton
Bradley Miller, Ajay Bahri, Cincinnati
Mark Vilem, Anlian Ang, Roland Lacy, Cleveland
Curt Marshall, Tim Wilson, RAPCA
Karen Granata, Matt Stanfield, Toledo
Frank Markunas, Sean Vadas, Akron
Cindy Charles, Anne Chamberlin, Portsmouth

cc: Misty Parsons, Alan Lloyd, Safaa ElOraby, Sudhir Singhal, Bob Hodanbosi, Jim Orlemann, Tom Rigo, Mike Ahern

Attachments
Incomplete form letter: "incomplt"
Complete form letter: "complt"
PTI Application form checklists: "pti_a99", "pti_b99", "pti_c99"
EAC form checklists:
"aggregat99", "agrichem99", "aluminum99", "ash99", "brick99", "carbon99", "cement99", "coal99", "coating99", "coke99", "concrete99", "dryclean99", "ferro99", "fertiliz99", "foundrie99", "fuelburn99", "galvan99", "gasoline99", "glass99", "grain99", "inciner99", "inorg99", "iron99", "landfill99", "lime99", "loading99", "mat_hand99", "metal99", "mineral99", "muni_inc99", "org_tank99", "process99", "pulp99", "roadpark99", "salt99", "sandblas99", "solvent99", "steel99", "storage99", "woodwork99", "yeast99"

<date> CERTIFIED MAIL [Optional]

<contact name>
<company name>
<street>
<city>, <state> <zip>

Re: <subject; PTI #, eu number(s)/descriptions, etc.>

Dear Mr(s). <contact>:

This letter is to inform you that on <date> this office received your application(s) for a permit to install (PTI) for the above referenced air pollution source(s), and that I [or reviewers name] have [has] been assigned to process your application. After our initial review, your application has been found to be preliminarily complete, therefore we can begin the technical review phase. This preliminary completeness determination does not imply that the application is approvable, only that we have enough information to continue the review. **It does not allow construction, installation or modification of any air contaminant source (emissions unit).**

Applications are generally reviewed on a first come, first serve basis. During the technical review, you may be contacted for additional information or for clarification. Once the review is complete, a PTI recommendation will be prepared either approving or denying the application (if review indicates a denial, you will be contacted to discuss options). The recommendation will then be forwarded to the Ohio EPA, Division of Air Pollution Control (DAPC), Central Office. It is possible they may ask for clarifying information as well before proceeding to issue either a draft permit, a direct final permit, or a denial of the application.

We estimate that review of your application will be completed and a recommendation forwarded to the Central Office, DAPC in approximately <weeks or days>, provided the application is found to be technically complete and no additional information is needed.

Please be assured that we will do everything possible to process your application in a timely manner. If you have any questions concerning this letter or your application, please contact <me/reviewer/supervisor> at <phone>.

Sincerely,

<permit reviewer> [or supervisor, etc.]
<title/office>

<date> CERTIFIED MAIL [Optional]

<contact>
<company name>
<street>
<city>, <state> <zip>

Re: <subject; PTI #, eu numbers/descriptions, etc.>

Dear Mr(s). <contact>:

This letter is to inform you that this office has completed a preliminary review of the above referenced permit to install application(s) received on <date>, and that I [or reviewers name] have [has] been assigned to process your application. The purpose of this review is to identify basic deficiencies as early in the permit process as possible, and allow you to make corrections. Our review found that the application you submitted is not complete and cannot be processed at this time. The attached checklist(s) details the additional information or corrections needed. A checklist is provided for each form you submitted which needs additional information or corrections.

Please submit the requested information to this office as soon as possible, but no later than thirty (30) days from the date of this letter. The sooner the needed information is received, the quicker the preliminary review can be completed. The data you submit may need to be in the form of a complete resubmittal, depending upon the box checked below:

☐ A new, signed copy of the complete application must be submitted. Signatures must be original, not copies.

☐ The requested data can be submitted without resubmission of the complete application. Only the pages with missing or incomplete information need to be resubmitted.

If the requested information is not submitted within 30 days, your application can not be processed and will be returned to you as incomplete. The preliminarily completeness review does not imply that the application is approvable, only that we have enough information to continue the review. **It does not allow construction, installation or modification of any air contaminant source (emissions unit).**

If you have any questions concerning this letter or your application, please contact <me/reviewer/supervisor> at <phone>.

Sincerely,

<permit reviewer> [or supervisor, etc.]
<title/office>

interoffice
MEMORANDUM

to: Air Program Supervisors, Ohio EPA District Offices and Local Air Agencies
from: Mike Hopkins, Manager, AQM&P, through Bob Hodanbosi, Chief, DAPC
subject: PTI Requirements for Hot-Mix Asphalt Plants
date: April 9, 1998

In response to complaints about asphalt plant emissions from affected citizens and neighboring businesses, Ohio EPA Division of Air Pollution Control (DAPC) has undertaken an investigation into VOC emissions from hot-mix asphalt plants. These facilities, also known as paving asphalt plants, asphalt batch plants, bituminous asphalt plants, asphaltic concrete plants, etc., have evolved beyond simply blending heated, virgin aggregate and asphaltic cement to produce a finished product. In hot-mix plants operating today, ingredients that may contribute to increasing VOC emissions include recycled asphaltic paving (RAP), foundry sand, slag, and recycled asphalt shingles. Additionally, the burning of waste fuels in asphalt plants and the use of virgin aggregate that may be contaminated with organic compounds has increased potential VOC emissions.

In order to develop better information on VOC emissions from asphalt plants, DAPC is undertaking an effort to acquire VOC emissions testing data. The available AP-42 emission factors have low reliability ratings, and the limited VOC testing that has been conducted at Ohio asphalt plants suggests significantly higher emissions than predicted by AP-42. As part of the effort to bridge this gap in reliable emissions data, DAPC will begin requiring VOC testing of hot-mix asphalt plants as a term and condition of permits to install (PTI). It is anticipated that test results will indicate that, for most plants, this will be a one-time only test to establish a plant-specific emission factor for VOC and to contribute to a general set of emission factors based on a statistically-significant body of test results. It should be recognized, however, that plants with uncommon fuels, job-mix formulae, or other potential contributors to VOC emissions may be required to demonstrate on-going compliance with VOC limits beyond the initial PTI demonstration.

In light of the significant amount of information <u>not</u> known regarding the source(s) of VOC emissions from hot-mix asphalt plants, we believe that placing a testing requirement on new and modified plants is warranted and will not place a significant financial burden on the affected permittees. The development of testing data covering a wide range of plant types and operating scenarios is the only legitimate strategy for establishing reliable emission factors and identifying the source(s) of VOC emission problems that have led to increasing complaints and enforcement involving the paving asphalt industry. (Additionally, a significant number of existing facilities will be required to test in order to contribute to the study, reducing any comparative disadvantage borne by new permittees that are required to test for VOC.)

The role of PTI writers in the hot-mix asphalt plant VOC emissions investigation shall be to continue to set limits on organic compound emissions in the PTI, in accordance with OAC rule 3745-31-05, and to begin including a performance testing requirement corresponding to that limit. The appropriate testing method should be identified as "method 25 or 25A, as appropriate," with additional guidance to be provided by DAPC Engineering Section concerning the testing of aggregate and the documentation of key operating parameters. Other aspects of the PTI process are not expected to be affected by this project.

Questions regarding the proposed testing or recommendations for the most appropriate methodology to measure asphalt plant VOC emissions may be directed to Patrick Haines, DAPC Engineering, at (614) 644-4838 or "patrick.haines@epa.state.oh.us".

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June 29, 1997

FINAL SCOPE OF WORK FOR THE SECOND PHASE OF THE DAPC'S INVESTIGATION INTO VOC EMISSIONS FROM HOT-MIX ASPHALT PLANTS

1. Review the rules and policies observed by other States when permitting hot-mix asphalt plants, and determine their appropriateness as a model for Ohio policy. What key operating parameters are monitored and/or restricted? Do these parameters differ for different plant types? Are these parameters more effective than outlet mass emission limitations in minimizing VOC emissions?

2. Contact asphalt plant manufacturers for information on key operating parameters for each type of asphalt plant and their proper operating levels. How are these parameters linked to potential VOC emissions? What are the design drum and stack temperature ranges? Do manufacturers recommend fuel types for specific plants? Are there recommended RAP usage limitations? Do manufacturers have recommendations that address exotic feed materials such as slag or high organic-content aggregate?

3. Based on (1), (2), and (8), define the key operating parameters for each type of plant that should be monitored and the ranges, thresholds, and/or minimums that should be established as part of BAT for the minimization of VOC emissions from hot-mix asphalt plants.

4. Define the protocol for testing VOC emissions from hot-mix asphalt plants, using method 25, 25A, or a modified version of either or both. What are the limitations of each method when applied to emission streams from asphalt plants? Are there inherent biases in either method? What method(s) has USEPA used to develop the AP-42 emission factors? What method(s) have been used in Texas in establishing their asphalt plant permitting program?

5. Define the protocol for analyzing the organic content of aggregate. Are there USEPA promulgated methods for such tests? If not, are there acceptable methods available from ASTM, NIOSH, or other reputable entities?

6. Define new PTI permitting procedures to be implemented in light of the results of items 1-5 and 7, if needed. (The creation of new procedures should reflect whether or not feedstocks, especially high-organic content aggregate, are the most significant contributor to hot-mix plant VOC emissions.)

7. Test the VOC emissions of hot-mix asphalt plants to ensure compliance with new source review and PTI requirements and to confirm the accuracy of AP-42 emission factors:

   a. Testing of VOC emissions from hot-mix asphalt plants will be required for new or

modified plants which receive a PTI subsequent to the issuance of the attached IOC (April 9, 1998). The testing requirements will be included in the terms and conditions of the PTI. Such tests will follow the testing protocol established through this Scope of Work. Test reports will include detailed parametric monitoring data and analysis of aggregate as determined through this Scope of Work.

b. Continue testing the VOC emissions of asphalt plants that have violations, verified complaints, nuisance issues, enforcement actions, or other evidence of non-compliance. Such tests will follow the testing protocol established through this Scope of Work. Test reports will include detailed parametric monitoring data and analysis of aggregate as determined through this Scope of Work. Identify, if possible, potential common sources of problem emissions, such as aggregate with high organic content and/or other high-VOC releasing feedstocks.

c. Testing of VOC emissions from hot-mix asphalt plants will be required for plants which receive Federally Enforceable State Operating Permits (FESOPs). The testing requirement will be included in the terms and conditions of each FESOP to confirm that the VOC emissions are below the Title V applicability threshold of 100 TPY. Such tests will follow the testing protocol established through this Scope of Work. Test reports will include detailed parametric monitoring data and an analysis of the aggregate as determined through this Scope of Work.

d. Assist in planning and witness a series of VOC emission tests sponsored by Flexible Pavements, Inc., to determine the effects of different aggregate sources and operating conditions on total VOC emissions from a single, representative source. Key operating parameters of the source will be closely monitored, and aggregate(s) analyzed in order to identify, if possible, the largest contributor(s) to plant VOC emissions.

8. Create a database for asphalt plant VOC emission testing data to include test results, parametric monitoring data, job-mix formulae, organic content of aggregate, and other relevant data as identified.

NOTE: USEPA is currently conducting testing of hot-mix asphalt plants to identify and quantify HAP emissions toward the development of MACT. Therefore, DAPC will limit this *Scope of Work* to addressing total VOC emissions, and will not duplicate the efforts of USEPA by developing data on the speciation of asphalt plant emission streams.

Schedule for Completion of the Scope of Work:

Item(s)	Completion Date
4 and 5	July 31, 1998
1 and 2	August 14, 1998
7 and 8	August 28, 1998
3 and 6	October 30, 1998

RESPONSE TO COMMENTS ON THE PROPOSED SCOPE OF WORK FOR THE SECOND PHASE OF THE DAPC'S INVESTIGATION INTO VOC EMISSIONS FROM HOT-MIX ASPHALT PLANTS

Note: some comments are paraphrased for clarity.

Comment:
"The *Scope of Work* should identify the type of nuisance issues and evidence of non-compliance that would justify ordering a VOC test of a hot-mix asphalt plant," from Ed Fasko, Cleveland Division of the Environment.

Response:
Based on the outcome of this *Scope of Work*, such guidance may be developed. However, it would be premature at this time to attempt to identify all the scenarios that justify a VOC test of an existing plant. Field offices are encouraged to exercise their discretion in ordering VOC tests of existing plants. To date, such tests have been ordered for facilities receiving verified complaints, facilities using non-traditional formulae that were not part of their permit applications (such as the 50% slag mix currently required for some Ohio Turnpike jobs), and facilities identified during routine inspections as having odor or nuisance problems.

Comment:
"Synthetic minor facilities that are issued a FESOP should be tested for VOC, to verify compliance with the limits keeping them out of Title V," from Ed Fasko, Cleveland Division of the Environment.

Response:
DAPC agrees, and added this as item 7.c.

Comment:
"We need to have a better understanding of the various mixes that are produced and the raw material constituents that differ from mix-to-mix. This information, in conjunction with the key operating parameters for the different types of plants, should put us in a better position in telling facilities what would constitute a "worst case scenario" for VOC emissions when they are required to conduct tests," from Don Waltermeyer, Ohio EPA, NWDO.

Response:
DAPC identified some of the parameters that contribute to "worst case" for VOC emissions in the complete Phase One *Scope of Work*, though this information does not appear in the Phase One summary report. This information can be distributed as a memorandum to those field offices that have not received a complete copy of the Phase One *Scope of Work*. Additional information regarding "worst case" should become apparent through Phase Two.

Comment:
"DAPC Central Office (CO) needs to put out some specific guidance right away telling everyone that CO will coordinate the gathering of [VOC testing] information and that all intent-to-test forms should be reviewed with CO staff to ensure consistency," from Don Waltermeyer, Ohio EPA, NWDO.

Response:
DAPC CO will continue to participate in hot-mix asphalt plant VOC tests. A cover memo will accompany the distribution of this Scope of Work instructing field offices to contact Patrick Haines of CO upon receipt of any Intent to Test form that includes an asphalt plant VOC test. CO will provide guidance regarding the parameters to be monitored, the method(s) to be employed, and the "worst case" operating scenario, based on the plant type and formulae mixed.

Comments:
"We suggest that items 4 and 5 [test procedures]... be defined as soon as possible," from Fred Frecker, President, Flexible Pavements, Inc.

Response:
These items will be first among the first completed, as reflected in the *Scope of Work* schedule.

Comments:
"We suggest a subparagraph be added which references the proposed FPI/OEPA test to investigate whether aggregates from particular sources cause higher VOC emissions than predicted," from Fred Frecker, President, Flexible Pavements, Inc.

Response:
DAPC has added item 7.d.

Comment:
"Flexible Pavements, Inc., would like to have it memorialized in the *Scope of Work* that any new PTI permitting procedures that are developed as a result of the *Scope of Work* will reflect whether or not aggregate is the most significant source of VOC emissions from plants with high VOC emissions," from Fred Frecker, President, Flexible Pavements, Inc.

Response:
DAPC has amended item 6.

Comment:
"The Scope of Work seems to focus on the Texas DNRCC approach to control asphalt plant VOC emissions through limits on key operating parameters. We believe that, should additional steps to limit VOC emissions become necessary, it would be simpler and more effective to provide outlet emission limits and allow each permitted entity to comply in the manner that best suits their operations,' from Fred Frecker, President, Flexible Pavements, Inc.

Response:
DAPC has amended item 1 to include the rules and policies of other states in general, not only Texas.

Comment:
"Item 7 states that new or modified plants which have been issued a PTI in 1998 will be tested for VOC emissions. Will this requirement be retroactive for facilities issued a PTI prior to the April 9, 1998 memo?" from Fred Frecker, President, Flexible Pavements, Inc.

Response:
DAPC amended item 7.a to clarify that VOC testing requirements will be included in the terms and conditions of new PTI(s). Therefore, those facilities that have received a PTI that does not include a VOC testing requirement will not be retroactively required to test, unless they are subject to item 7.b.

Comment:
"In item 7, the word 'contaminated' may be inappropriate to describe high-organic content aggregate," from Fred Frecker, President, Flexible Pavements, Inc.

Response:
DAPC has amended item 7.b.

Comment:
"In item 8, the reference to the creation of a 'statistically significant body of test results' in describing the proposed database may be overly-ambitious, given the large number of variables that exist within the systems being studied. To accumulate a body of work with statistical significance would require much more testing than has been proposed," from Fred Frecker, President, Flexible Pavements, Inc.

Response:
DAPC has amended item 8.

Investigation Into VOC Emissions From Asphalt Batch Plants
Ohio EPA, Division of Air Pollution Control

Summary Report, Phase I
February 20, 1998

Introduction

In response to the expressed concerns of citizens, regulators, and industry representatives, Ohio EPA, Division of Air Pollution Control (DAPC) has prepared a seven-part investigation addressing VOC emissions from hot-mix asphalt plants. The investigation was prepared to fulfill the *Scope of Work* developed by the DAPC Engineering Section. A draft *Scope of Work* was made available to interested parties for comment prior to initiating the investigation, and the final version (attached) was distributed to affected parties during the course of the study.

The organization of this summary report reflects the organization of the seven-part, Phase I investigation report. Highlights and conclusions from each part of Phase I follow. At the end of this document, topics deserving additional research are noted. Supporting figures and tables are attached.

Phase I, Part 1: Description of hot-mix asphalt manufacturing

Hot-mix asphalt is prepared by blending heated, sized aggregate with asphaltic cement. Most asphalt plants include reclaimed asphalt pavement (RAP) in their formulations, as a substitute for virgin aggregate. Virtually all hot-mix plants that are capable of accepting RAP will include 10% RAP in their formulations. When using 10% RAP, job-mix formulae do not need to be adjusted from "all-virgin" formulae, and finished-product characteristics will be virtually unchanged. Use of higher percentages of RAP may increase VOC emissions, as organic compounds can be heat-stripped, or "scorched," from RAP material.

While RAP use may be a contributor to VOC emissions, it is important to recognize that recycling old paving material may provide significant environmental and economic benefits. According to industry sources, almost 90% of the paving removed from roadways goes back into paving asphalt, instead of being landfilled. Consumption of virgin aggregate and asphaltic cement is reduced at a corresponding rate.

Three major plant configurations are used in the production of hot-mix asphalt: batch plants, parallel-flow drum plants, and counter-flow drum plants. As Figure 1 illustrates, batch plants combine aggregate that has been heated and dried in a rotary dryer with heated asphaltic cement; the mixture is blended into paving asphalt in a pug mill. When used in a batch plant, RAP is combined with heated, dried aggregate in the hot elevator or pug mill, prior to addition of asphaltic cement. As such, the percentage of RAP that can be amended to batch-mixed asphalt is

limited by the conductive heating capacity of the aggregate. Batch mix plants are generally operated using no more than 20%-25% RAP.

As Figure 2 illustrates, parallel-flow drum plants combine heating and drying of aggregates with mixing of liquid asphaltic cement in a single dryer/drum. Aggregate is sized and weighed "cold" and is introduced into the flame zone of the rotating drum. Asphaltic cement is added in the lower third of the drum, where it is mixed with aggregate through the veiling action of the flights lining the drum. Both aggregate and asphaltic cement move "downslope" through the drum in the same direction as combustion products. Finished asphalt is conveyed to a hot storage silo or surge bin. Unlike batch mixing, parallel-drum processes can continuously produce asphalt.

Parallel-flow plants can theoretically accommodate up to 50% RAP because RAP is heated directly with aggregate. Unfortunately, exposure of RAP to flame fronts can cause noteworthy emissions of VOC and "blue haze," due to scorching. Parallel-flow plants typically limit RAP usage to 30% to reduce the possibility of heat-stripping organic compounds from RAP.

As Figure 3 illustrates, counter-flow drum mix plants combine heating and drying of aggregates with mixing of liquid asphaltic cement in a single dryer/drum, but unlike a parallel-flow drum the mixing occurs behind (downslope of) the burner flame zone. The isolation of asphaltic cement and RAP from the flame zone reduces opportunities for heat-stripping of organic constituents by exhaust gases, with resultant reductions in VOC emissions. Finished asphalt is conveyed to a hot storage silo or surge bin. Like parallel-flow drum mixing, counter-flow drum processes can continuously produce asphalt.

Like parallel-flow plants, counter-flow plants can theoretically accommodate up to 50% RAP, because of their ability to heat RAP directly. Counter-flow plants typically limit formulations to about 40% RAP. Ohio Department of Transportation specifications for paving asphalt allow RAP formulations between 10% and 50%, depending on the intended use of the paving product. Higher-quality surface courses tend to allow less RAP usage; base courses can accommodate higher RAP substitution.

According to US EPA, about 2,300 of the 3,600 active asphalt plants in the US are batch mix plants, about 1,000 are parallel-flow drum plants, and about 300 are counter-flow drum plants. The predominance of batch mix plants reflects the fact that batch mix technology is the oldest of the three processes and has proven to be both rugged and cost-effective. The continuous-production capacity of drum mix configurations is better suited to large-scale operations with fixed job mix formulae. Despite the predominance of batch mix plants among active facilities, 85% of the plants being manufactured today are of counter-flow drum mix design. Batch mix plants and parallel-flow drums comprise 10% and 5%, respectively, of newly manufactured plants.

Phase 1, Parts 2 & 3: VOC Emission Factors and Stack Test Results

Based on the information developed through this investigation, VOC emissions from hot-mix

asphalt plants can range from less than 0.01 pound VOC/ton asphalt produced to as much as 1.0 pound/ton for different plants under various operating scenarios. Given that a typical hot-mix plant produces between 200-300 tons of asphalt per hour, hot-mix asphalt plants have the potential to be significant sources of VOC emissions. Despite this, there is currently no formal activity underway within US EPA to establish VOC emission standards for hot-mix asphalt plants.

US EPA has developed AP-42 emission factors for hot-mix asphalt plants. The existing VOC emission factors are "D" rated, and the draft AP-42 emission factors currently under development for asphalt plant VOC emissions are also "D" rated. The results of hot-mix plant emission tests in Ohio and Texas (Tables 1,2) and the tests that contributed to AP-42 (Tables 3-5) indicate that asphalt plant VOC emissions are highly variable and can greatly exceed the rate predicted by AP-42.

Given the limited amount of VOC stack testing data available from Ohio-based hot-mix plants and the low reliability rating of AP-42 emission factors, it may be necessary to develop additional VOC emissions data through testing. Emission factors based on Ohio and Texas tests are compared to current and draft AP-42 emission factors in Table 6. This investigation has developed sufficient information to define the probable "worst case" operating scenarios for different plant configurations, which will help define test parameters for future tests. "Worst case" operations for VOC include maximizing RAP, maximizing aggregate sizing to minimize aggregate surface area, maximizing dryer/drum temperature, and using the permitted fuel with the highest potential VOC emissions.

Phase 1, Parts 4 & 5: Rules in Other States; Contribution of Aggregate-bound Organics

As part of this investigation, emission standards for hot-mix asphalt plants in other states were examined. Among the 10 most-populated states, including Ohio, only New Jersey and Texas have state rules specifically limiting VOC emissions from hot-mix asphalt plants. Testing performed in these two states prior to enacting VOC-limiting rules supported the assertion that asphalt plants may vary widely in their actual emissions from the predictions of AP-42.

New Jersey has enacted rules limiting VOC emissions to 125 parts-per-million (ppm) from new sources, 250 ppm from existing sources. Because of these rules, testing data from New Jersey is reported on a concentration basis and does not contribute significantly to this investigation. Texas does not apply VOC emission limitations to asphalt plants by rule, but includes operating restrictions in their air pollution permits to ensure that plants are maintained and operated in accordance with good engineering practices (see Table 7). Such operating restrictions may include, but are not necessarily limited to, the following:

- restrictions on the use of cutback, or solvent-thinned, asphalt;
- temperature restrictions on the dryer/drum;
- control of aggregate moisture content, to minimize quenching effects in dryer/drum;
- restrictions on fuel type;

- use of pre-combustion chambers, revised flame fronts, double-barrel designs, and other measures to prevent the exposure of RAP and asphaltic cement to flame;
- reduced RAP substitution;
- and, restrictions on the use of anti-strip chemicals and other organic additives such as SBR-latex.

Questions regarding the contribution of aggregate-bound organic compounds to VOC emissions were raised during the development of the *Scope of Work*, and every reasonable attempt was made to answer those questions. Unfortunately, attempts to quantify the contribution of aggregate-bound organic compounds to VOC emissions of hot-mix asphalt plants were largely unsuccessful. The single Ohio quarry that acknowledged performing periodic analyses of aggregate samples for total petroleum hydrocarbons declined to share data with this investigation. In the absence of data defining a causal relationship between aggregate composition and asphalt plant emissions, this investigation has focused on other contributors to VOC emission rates, as described above. Testing in this area is needed, if the potential contributions of aggregate-bound organics are to be quantified.

Phase 1, Parts 6 &7: VOC Control Strategies and Remaining Questions

Air pollution controls at asphalt plants are primarily intended to control emissions of particulate matter and usually consist of fabric filters or venturi scrubbers. Add-on controls to reduce VOC emissions, such as thermal oxidizers, are not common in Ohio nor in other states.

VOC emission tests indicate that plant configuration can play a major role in the expected emissions of asphalt plants, particularly when RAP is utilized. As such, it may be reasonable to establish plant configuration as Best Available Technology (BAT). Other factors affecting VOC emissions can include the condition and make-up of aggregate, degree of RAP substitution, type of asphaltic cement, type of dryer/drum fuel used, and plant-specific engineering practices such as operating temperature, vent stream quenching, exposure of RAP and asphaltic cement to direct flame, condition of burners, etc. Identification of the factor(s) that most contribute to hot-mix asphalt plant VOC emissions will require additional testing.

Based on a review of available testing data and interviews with persons including air pollution authorities from Ohio and other states, owner/operators of hot-mix plants, and representatives of the professional associations of the paving and aggregate industries, this investigation concludes that good engineering practices and minor controls on feedstocks (such as aggregate OC content, RAP substitution, asphaltic cement additives, etc.) can help to minimize VOC emissions from hot-mix plants. However, ultimate VOC emission rates may still be substantial.

Conclusions

Testing in Ohio and elsewhere indicates that VOC emissions from hot-mix asphalt plants may be more significant than predicted by AP-42 emission factors. The magnitude of these emissions may justify control requirements and/or operating restrictions not previously assigned to asphalt

plants in Ohio. Phase II of this investigation should include a determination of best operating practices for each type of plant, based on information provided by manufacturers, trade associations, and testing. Additionally, Phase II should include a significant number of VOC emissions tests, to include stack sampling, analysis of aggregate organic content, and detailed parametric monitoring. It should be possible to develop reliable emission factors based on such testing, to identify those practices and parameters that most significantly affect VOC emissions, and to quantify the role of aggregate-bound organic content as a contributor to VOC emissions. Details of Phase II will be proposed in a Phase II *Scope of Work.*

Table 7. Operating Restrictions for VOC Control, Texas NRCC*

Operating Parameter	Limit
Fuel Type	Natural gas or #2 diesel only, with case-by-case exceptions allowing waste oil with sulfur, metals and halogens feed limits
Aggregate Moisture	≤5% moisture content, unless control of particulate emissions requires case-by-case exception
Dryer/Drum Temperature	≤325°F for all dryers/drums (≤340°F allowed with compliance demonstration under worst case conditions; compliance requires <5% opacity and no scorching/heat stripping of materials at elevated temperature when making worst-case product)
Mix Additives:	
Liquid amine anti-strip	1% by weight
Low- or no-amine anti-strip	no limit
SBS (styrene-butadiene amendment)	6% by weight
SBR latex (styrene butyl-rubber latex)	6% by weight
EVA (ethyl vinyl acetate)	10% by weight
Crumb rubber	18% by weight
Gilsenite and similar fiber-based amendments	no limits
RAP	50% by weight (up to 95% allowed with thermal oxidizer)

* More information is available on the TNRCC website, NSR Air Permits web pages: "www.tnrcc.state.tx.us/air/nsr_permits/"

Table 6. Emission Factors from AP-42 and Other Testing

Plant Type	Firing #2 oil (no RAP)	Firing #2 oil (RAP)	Firing #6 oil (no RAP)	Firing #6 oil (RAP)	Firing nat. gas (no RAP)	Firing nat. gas (RAP)
Batch						
Current AP-42	0.046 lb/T	same	0.046 lb/T	same	0.017 lb/T	same
Draft AP-42	0.015 lb/T	same	0.043 lb/T	same	0.015 lb/T	same
Investigation Tests[1]	*	*	*	*	*	*
Parallel-flow						
Current AP-42	0.069 lb/T	same	0.069 lb/T	same	0.051 lb/T	same
Draft AP-42	0.039 lb/T	same	0.091 lb/T	same	0.039 lb/T	same
Investigation Tests[1]	0.068 lb/T **	0.355 lb/T	0.106 lb/T	*	*	*
Counter-flow						
Current AP-42	0.051 lb/T	same	0.051 lb/T	same	0.051 lb/T	same
Draft AP-42	0.039 lb/T	same	0.091 lb/T	same	0.039 lb/T	same
Investigation Tests[1]	*	0.275 lb/T	*	*	*	*

* insufficient testing data to develop independent emission factors

** discarding outlying value (1.999 lb/T) from Investigation test results

[1] Calculated as the mean of data presented in Tables 1-5. Calculation of emissions factors for use in permitting may include more complex statistical methods to assure confidence in the application factors to all sources.

12/09/92	unk	#2 Oil	35	Baghouse	unk	0.036 lb/T	25A	Macasphalt, Cross City	FL

Table 5. Selected AP-42 Tests of Parallel-Drum Plants (SD: 0.054)

Test Date	Process Weight Rate	Fuel Type	% RAP	Control Equip.	Exhaust Temp. (°F)	VOC Emissions	Test Method	Company Name	State
07/13/93	unk	Propane	unk	Baghouse	unk	0.044 lb/T	25A	Charles Oliver & Sons	CA
06/10/91	unk	#2 Oil	unk	Baghouse	unk	0.015 lb/T	25A	Granite Construction Co.	CA
09/04/87	unk	#2 Oil	unk	Baghouse	unk	0.012 lb/T	25A	Weldon Asphalt Co.	NJ
04/92	unk	#6 Oil	unk	Baghouse	unk	0.091 lb/T	25A	Mathy Construction Co.	WI
02/81	unk	#6 Oil	unk	Baghouse	unk	0.210 lb/T	25A	US EPA	DC
01/94	unk	Nat. Gas	0	Baghouse	unk	0.073 lb/T	25A	WW Engineering	MI
07/90	unk	Nat. Gas	0	Scrubber	unk	0.083 lb/T	25A	Hawraker, Inc.	PA
06/25/92	unk	#2 Oil	0	Scrubber	unk	0.037 lb/T	25A	James Julian, Inc.	PA
09/04/87	unk	#2 Oil	0	Baghouse	unk	0.030 lb/T	25A	Klug Brothers, Inc.	WV
11/88	unk	#2 Oil	0	Baghouse	unk	0.006 lb/T	25A	Hudson Materials, Inc.	NJ
04/25/88	unk	#2 Oil	0	Baghouse	unk	0.023 lb/T	25A	Weldon Asphalt, Inc.	NJ
10/09/90	unk	Propane	10	Baghouse	unk	0.064 lb/T	25A	I.A. Construction Co.	CA
07/92	unk	Propane	10	Baghouse	unk	0.120 lb/T	25A	E.J. Breneman, Inc.	PA
08/91	unk	Nat. Gas	25	Scrubber	unk	0.046 lb/T	25A	Hawraker, Inc.	PA

Table 2. Counter-flow Drum Plant Test Results (not included in AP-42)

Test Date	Process Weight Rate	Fuel Type	% RAP	Control Equip.	Exhaust Temp. (°F)	VOC Emissions	Test Method	Company Name	State
06/25/97	344 TPH	#2 oil	15	Baghouse	212	0.167 lb/T	25A	Kokosing Materials, Sheffield	OH
07/29/97	350 TPH	#2 oil	25	Baghouse	346	0.383 lb/T	25A	Kokosing Materials, Sandusky	OH
					Mean:	0.275 lb/T	SD:	0.153	

Table 3. Selected AP-42 Tests of Batch Plant (SD: 4.61)

Test Date	Process Weight Rate	Fuel Type	% RAP	Control Equip.	Exhaust Temp. (°F)	VOC Emissions	Test Method	Company Name	State
02/92	unk	Nat. Gas	unk	Baghouse	unk	0.021 lb/T	25A	Mathy Construction Co.	WI
11/20/89	unk	#2 Oil	0	Baghouse	unk	0.010 lb/T	25A	Quality Materials, Inc.	NJ
09/01/88	unk	#2 Oil	0	Baghouse	unk	8.0 lb/T	25A	Jackson Asphalt Co.	NJ

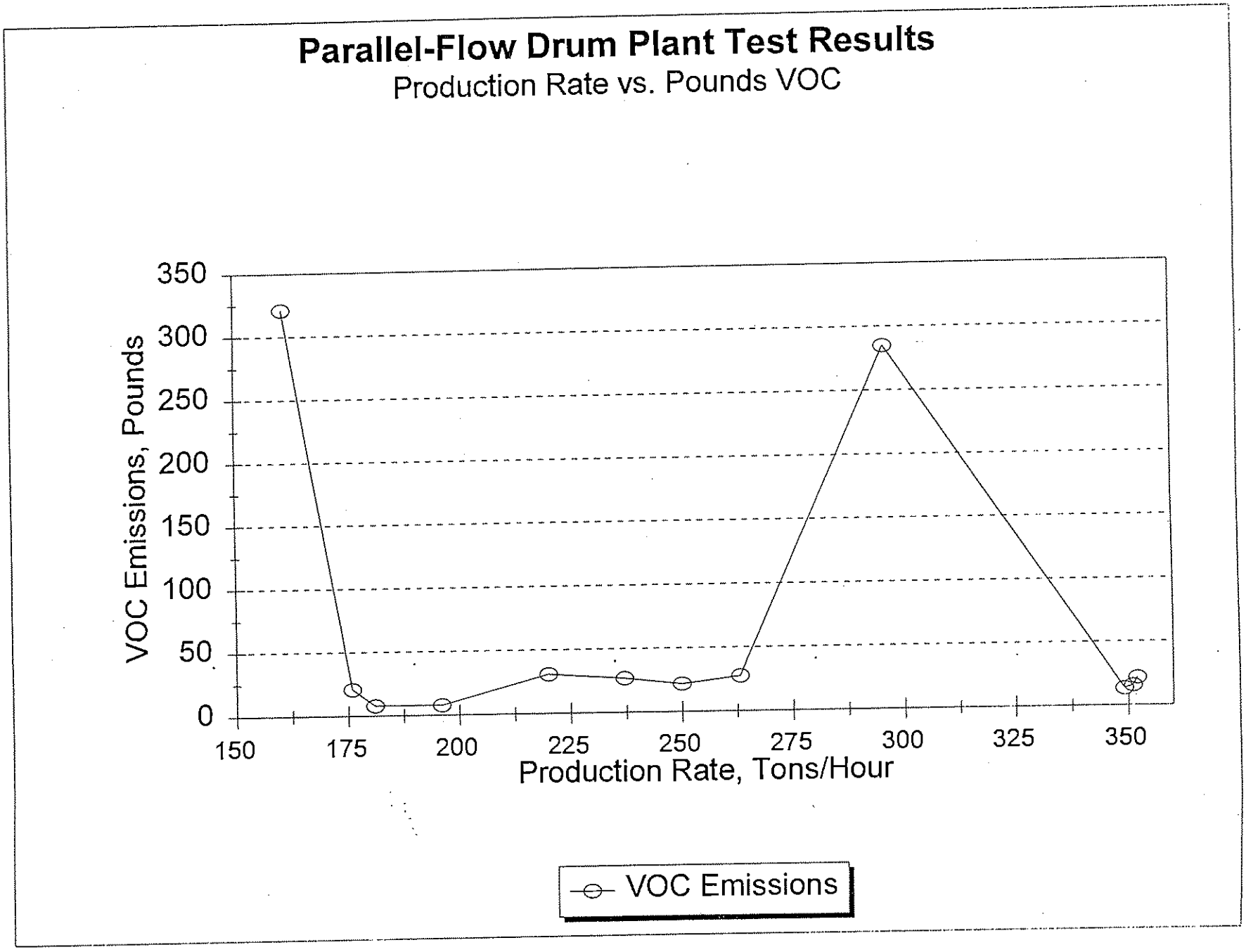
Table 4. Selected AP-42 Tests of Counter-flow Plants (SD: 0.024)

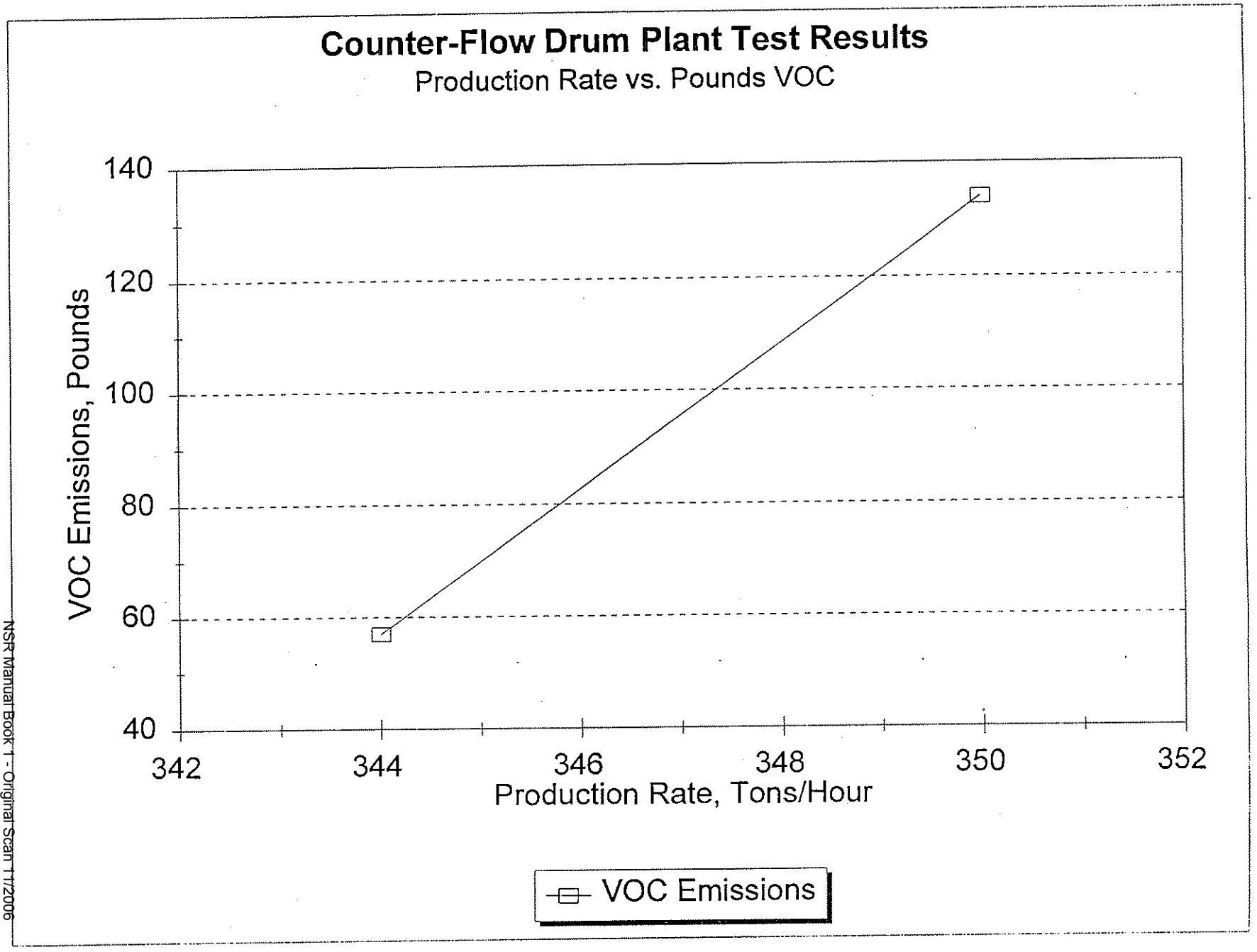
Test Date	Process Weight Rate	Fuel Type	% RAP	Control Equip.	Exhaust Temp. (°F)	VOC Emissions	Test Method	Company Name	State
08/05/92	unk	Nat. Gas	0	Baghouse	unk	0.009 lb/T	25A	Industrial Asphalt	CA
09/01/94	unk	Nat. Gas	0	Baghouse	unk	0.019 lb/T	25A	Fred Weber, Inc.	MO
10/23/91	unk	Nat. Gas	13	Baghouse	unk	0.039 lb/T	25A	Lehman Roberts Co.	TN
10/07/91	unk	Nat. Gas	30	Baghouse	unk	0.080 lb/T	25A	APAC of Tennessee	TN
12/04/92	unk	#6 Oil	30	Baghouse	unk	0.043 lb/T	25A	Macasphalt, Melbourne	FL

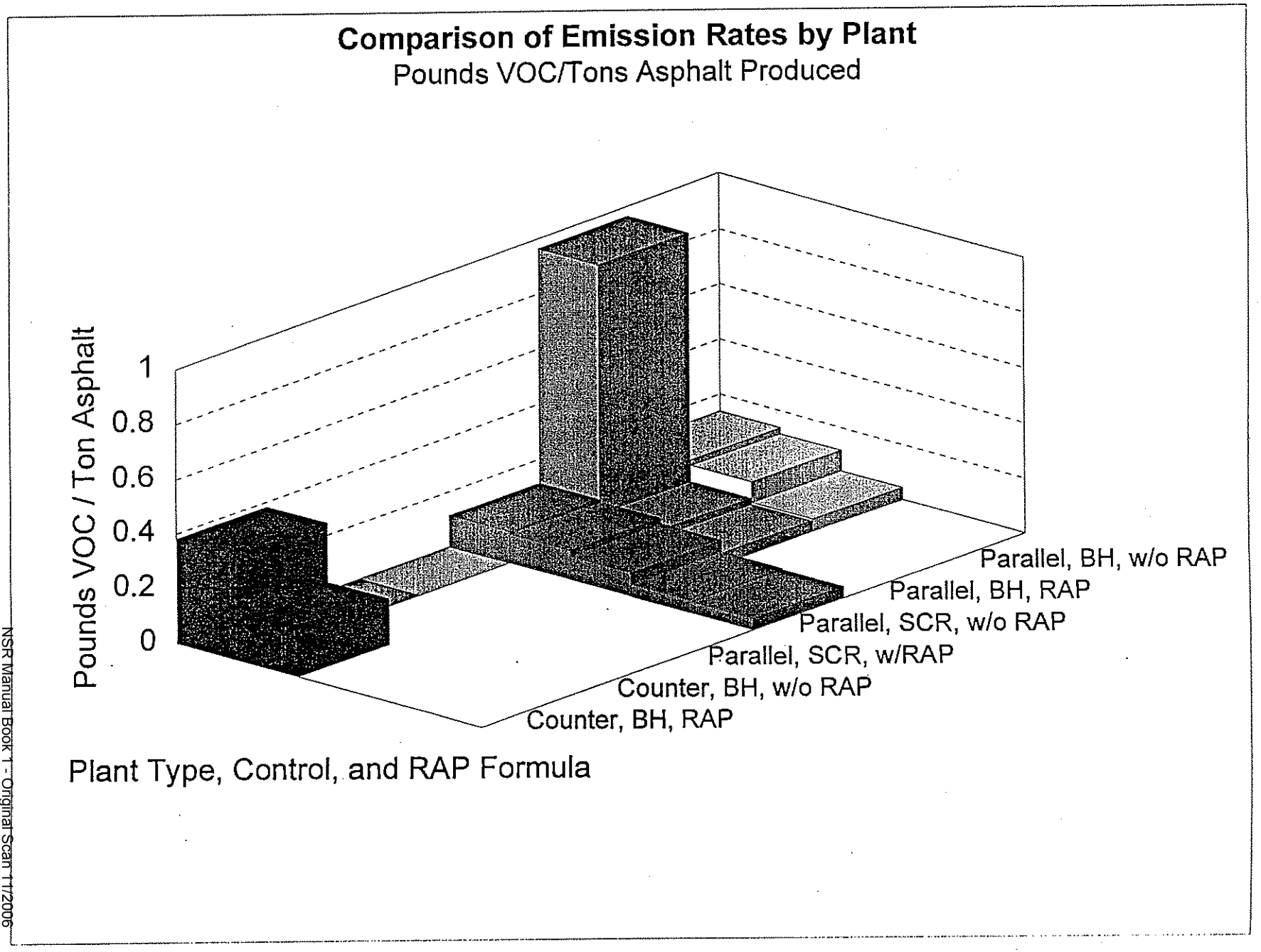
Table 1. Parallel-flow Drum Plant Test Results (not included in AP-42)

Test Date	Process Weight Rate	Fuel Type	% RAP	Control Equip.	Exhaust Temp. (°F)	VOC Emissions	Test Method	Company Name	State
07/02/97	296 TPH	#2 oil	20	Baghouse	282	0.964 lb/T	25A	StoneCo, Sandusky	OH
07/93	352 TPH	#2 oil	25	Baghouse	312	0.062 lb/T	25A	The Shelly Co.	OH
07/93	349 TPH	#2 oil	30	Baghouse	311	0.039 lb/T	25A	The Shelly Co.	OH
					Mean:	0.355 lb/T	SD:	0.527	
07/93	351 TPH	#2 oil	0	Baghouse	311	0.045 lb/T	25A	The Shelly Co.	OH
07/93	220 TPH	#2 oil	0	Baghouse	280	0.140 lb/T	25A	The Shelly Co.	OH
08/09/88	181 TPH	#2 oil	0	Scrubber	315	0.045 lb/T	25	Colorado Co.	TX
08/10/88	161 TPH	#2 oil	0	Scrubber	198	1.999 lb/T	25	Colorado Co.	TX
10/13/88	196 TPH	#2 oil	0	Scrubber	278	0.041 lb/T	25	Austin Paving	TX
					Mean:	0.068 lb/T*	SD:	0.048	
09/08/88	263 TPH	Waste oil	0	Scrubber	270	0.105 lb/T	25	Austin Paving	TX
09/07/88	237 TPH	Waste oil	0	Scrubber	270	0.114 lb/T	25	Austin Paving	TX
09/08/88	250 TPH	Waste oil	0	Scrubber	270	0.086 lb/T	25	Pioneer Aggregate	TX
11/10/88	176 TPH	Waste oil	0	Baghouse	305	0.119 lb/T	25	Colorado Co.	TX
					Mean:	0.106 lb/T	SD:	0.015	

* discarding outlaying value (1.999 lb/T) from Investigation test results


Parallel-Flow Drum Plant Test Results
Production Rate vs. Pounds VOC
VOC Emissions, Pounds
350
300
250
200
150
100
50
0
150
175
200
225
250
275
300
325
350
Production Rate, Tons/Hour
VOC Emissions


Counter-Flow Drum Plant Test Results
Production Rate vs. Pounds VOC
VOC Emissions, Pounds
140
120
100
80
60
40
342
344
346
348
350
352
Production Rate, Tons/Hour
VOC Emissions



No data available for batch plants or counter-flow, scrubber-controlled plants

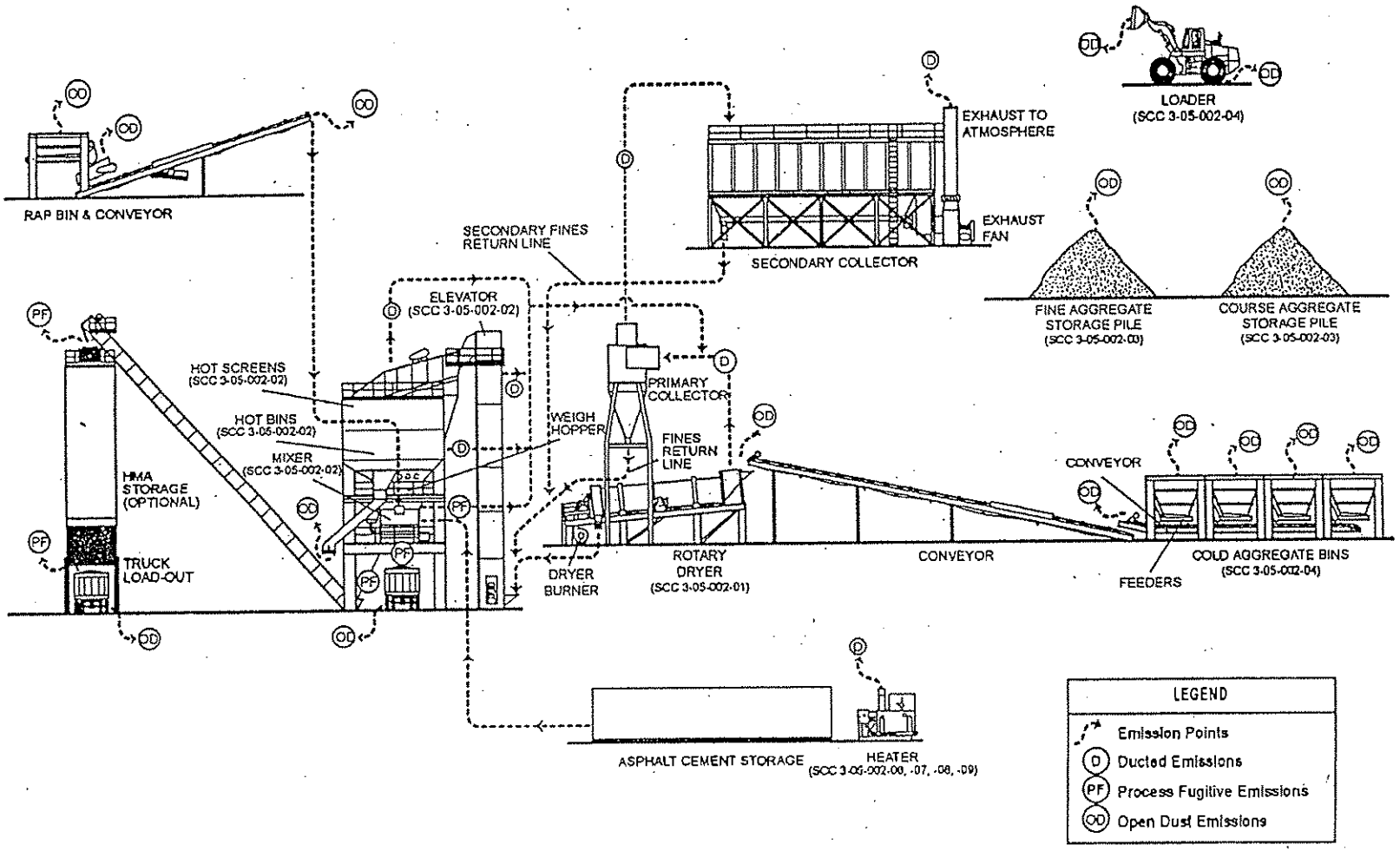


Figure 1. General process flow diagram for batch mix asphalt plants. (Source Classification Codes in parentheses.)

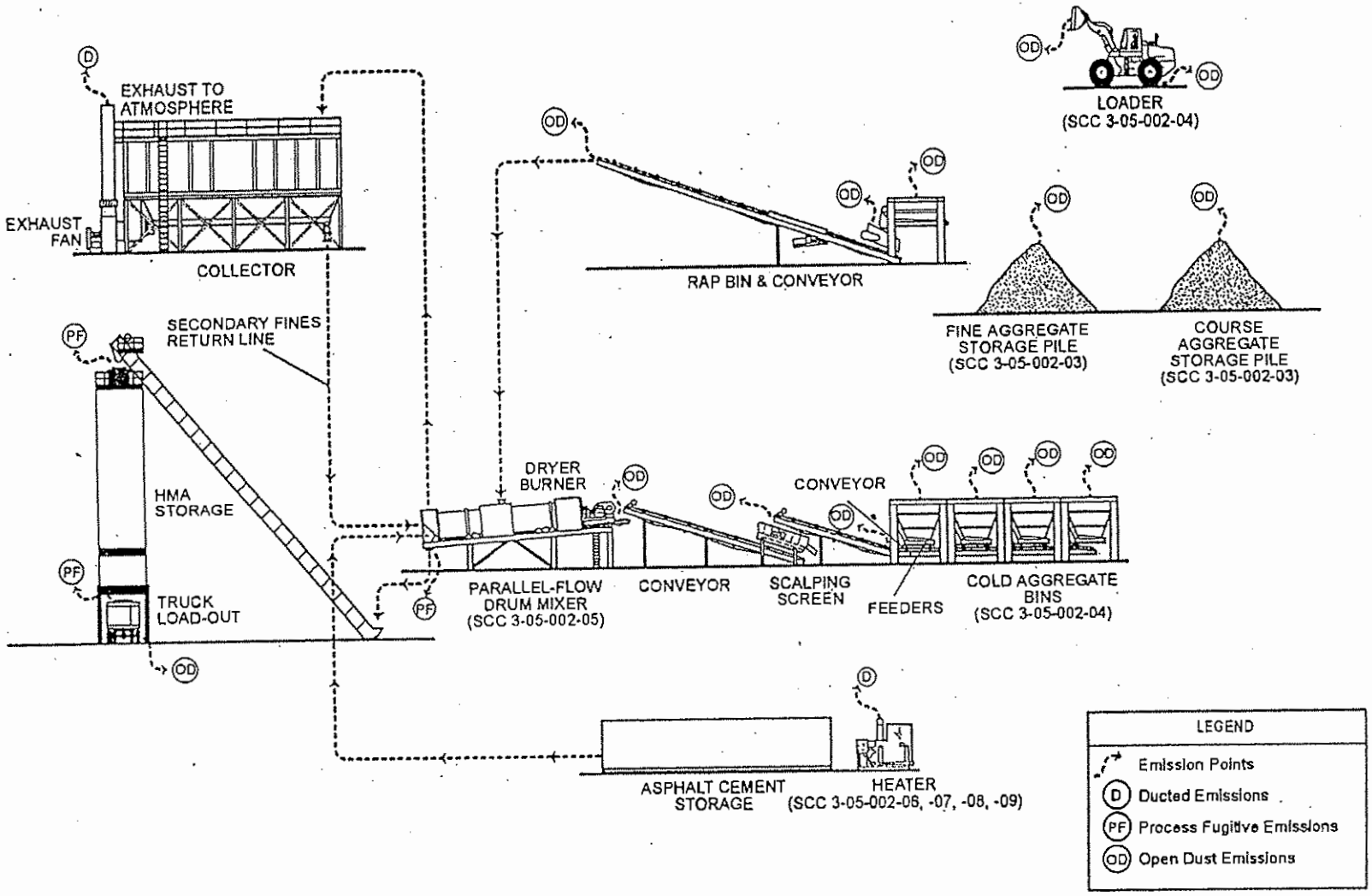


Figure 2. General process flow diagram for drum mix asphalt plants. (Source Classification Coes in parentheses.)

SCOPE OF WORK FOR THE FIRST PHASE OF THE DAPC'S INVESTIGATION INTO VOC EMISSIONS FROM ASPHALT BATCH PLANTS

1. Identify the different types of asphalt plant equipment configurations and explain the operation of each. Which technology is the most common and why? Which is the newest technology?

2. Which types of asphalt batch plants process recycled asphalt pavement (RAP)? What is the average organic content of RAP? What is the typical % of RAP used in each type of asphalt batch plant? What are the ODOT specifications concerning the use of RAP?

3. What are the current AP-42 emission factors for VOC emissions from asphalt batch plants? What are the reliability ratings for these factors? What is the basis for each factor? Obtain copies of the reports and stack tests that were used to develop each emission factor.

4. Is the USEPA in the process of updating the AP-42 emission factors for VOC emissions from asphalt batch plants? If so, what are the proposed emission factors and the bases for those proposed emission factors? Obtain copies of the relevant documents.

5. Identify and summarize the results of all the VOC emission tests that have been performed in Ohio for asphalt batch plants. Include, if possible, the type of plant, the process weight rate during the test, the % of RAP being processed, the supplier of the aggregate, the type of control equipment employed, the temperature of the exhaust gases during each test run, the VOC emission rate for each test run, and the filterable and non-filterable particulate emission rate for each test run. Is there any information that indicates what portion of the total VOC emissions is condensible organics?

6. Check with the USEPA and several other states (e.g., California, Illinois, Michigan and New York) to see if they have a database for the results of VOC emission tests for asphalt batch plants. Do the emission tests that were conducted for the use of crumb rubber contain helpful information? Obtain as much of the information outlined in (5) as possible.

7. Summarize the information contained in the USEPA's BACT/LAER clearinghouse concerning VOC emissions from asphalt batch plants.

8. Have any studies and/or reports been written concerning VOC emissions from asphalt batch plants? Check with the USEPA and Flexible Pavements, Inc. Obtain a copy of whatever is available.

9. What would be the "worst case" operating scenario for VOC emissions for each type of asphalt batch plant?

10. What types of control technologies could be used to control the VOC emissions from asphalt batch plants? Are any of these technologies currently employed in Ohio? Survey the field offices and check with Flexible Pavements, Inc. and the USEPA's CTC.

11. How does the organic content of aggregates vary around the State? Is the organic content routinely measured? If so, what test methods are used? Check with the Ohio Aggregates Association to see if any information exists concerning these questions.

12. Should the organic content of the aggregate be a primary concern in determining when an asphalt batch plant should be required to test for VOC emissions? Should the aggregate supplier be required to provide an analysis of the organic content of the aggregate to the owner/operator of the asphalt batch plant that will be using the aggregate?

13. Do any states regulate VOC emissions from asphalt batch plants? If so, how? Conduct a survey of the 10 most-populated states in the nation.

14. Does the USEPA have any written new source review policies concerning VOC emissions from asphalt batch plants? If so, obtain a copy of whatever is available.

15. What additional information is needed to define the DAPC's policy concerning VOC emissions from asphalt batch plants?

Schedule for completion of the Scope of Work:

Item(s)	Completion Date
1 and 2	09/26
3, 4, 7, 8, and 14	10/03
5 and 6	10/17
9 and 13	10/24
11 and 12	10/31
10	11/14
15	11/28

JAO - c:\wp61\docs\asphalt - 09/23/97

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11 and 12	10/31
10	11/14
15	11/28

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OhioEPA
State of Ohio Environmental Protection Agency
Central District Office

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George V. Voinovich
Governor
Donald R. Schregardus
Director

INTEROFFICE COMMUNICATIONS

****

TO: Distribution

FROM: Brad Thomas, DAPC, CDO

SUBJECT: Crumb Rubber Modified Asphalt Mix Test Results

DATE: May 18, 1994

****

Attached are the emission summaries from the above referenced testing. On July 28-30, 1993, six test runs were conducted on a 300 ton per hour asphalt plant to determine emissions from crumb rubber modification of asphalt cement. The tests performed were USEPA Methods 1, 2, 3A (for oxygen and carbon dioxide), 4, 5, modified Method 5 (for polynuclear aromatic hydrocarbons), 7E (nitrogen oxides), 9 (opacity), 10 (carbon monoxide), 18 (methane, benzene, toluene, ethylbenzene, xylene, styrene, and butadiene), 25A (total hydrocarbons), 29 (multiple metals), 202 (condensible particulate matter), and SWA-846 Method 0011/8315 (formaldehyde). Method 6C (for sulfur dioxide) was attempted but the monitor failed during the testing. I do believe, though, the sulfur dioxide emissions are significant with and without the crumb rubber.

The first three runs were the "test" runs in which crumb rubber was added to the asphalt cement. The second three runs were the "control" runs in which no crumb rubber was used.

The process parameters for the test runs and control runs are as follows:

Test Runs (1-3)

Mix temperature: 305-315°F
Production rate: Approximately 155 tons per hour
Mix composition: Limestone coarse aggregate, sand, asphalt cement ("AC-10") which was 7.9% by weight of total mix, and crumb rubber which was 19% by weight of asphalt cement (or 1.5% of total mix by weight). The asphalt cement was kept at 350°F while rubber was added.

Control Runs (4-6)

Mix temperature: 285-300°F
Production rate: Approximately 220 tons per hour
Mix composition: Limestone coarse aggregate, sand, asphalt cement ("AC-20") which was 6.3% by weight of total mix.

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To summarize the results:

- the particulate matter emissions don't appear significantly different between the "test" run and the "control" run;

- the organic condensibles were different but it could be explained by different mix temperatures, different AC content, or addition of crumb rubber;

- the multiple metal emissions, inorganic condensible emissions, carbon monoxide, and nitrogen oxide emissions don't appear significantly different between "test" runs and "control" runs;

- the VOC data (Method 18) appears consistent across the runs but emissions of the target compounds (including formaldehyde) may be higher without addition of rubber to mix;

- the total hydrocarbon (THC) data (Method 25A) is significantly different between "test" and "control" runs (i.e. the measurements show higher emissions as carbon in the test run). The reason for this could be the different mix temperatures or the different AC content. Note that the overall AC weight was 1.6 tons per hour higher in the "control" mix than in the "test" mix.

  Before a cause and effect of emission increases/decreases due to the addition of crumb rubber can be established, more rigorous testing should be conducted and the operating conditions of the plant should be more consistent.

BCT/bja

Distribution:

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John Paul, RAPCA
Leon Weitzel, Lake County, APC
Don Walden, Portsmouth Air Pollution Unit
Pat DeLuca, NOVAA
Lee Pfouts, Toledo, DPC

Table I

Particulate Matter Test Summary

Run	Date	Time	Filterable PM		Organic Condensibles		Inorganic Condensibles		Isokinetics
			gr/dscf	lb/hr	gr/dscf	lb/hr	gr/dscf	lb/hr	%
1	07-28	07:29 - 10:45	0.0454	10.61	0.0604	14.11	0.0061	1.43	91.9
2	07-29	07:20 - 09:00	0.0503	10.75	0.1210	25.85	0.0064	1.37	101.8
3	07-29	11:26 - 13:37	0.1147	24.31	0.1513	32.06	0.0134	2.84	98.7
4	07-30	07:06 - 08:32	0.0359	8.74	0.0091	2.21	0.0027	0.66	91.9
5	07-30	10:12 - 11:37	0.0455	11.10	0.0071	1.73	0.0063	1.54	97.2
6	07-30	13:15 - 15:22	0.0413	10.03	0.0021	0.51	0.0106	2.57	99.2

Broken bag

SO_2? – monitor went down

Table II-A

Multi-Metals Test Summary
gr/dscf Concentrations

0.1#/Hr

Dry std. ft³ per hour

DSCFM	Run	Date	Time	Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Selenium	Silver
1,635,273.2	1	07-28	07:29 - 10:49	$<1.52\times10^{-5}$	1.07×10^{-5}	4.19×10^{-4}	4.57×10^{-6}	$<7.16\times10^{-6}$	8.37×10^{-7}	$<1.52\times10^{-5}$	$<7.61\times10^{-7}$
1,495,367.0	2	07-29	07:15 - 08:56	$<1.12\times10^{-5}$	7.84×10^{-6}	5.60×10^{-5}	3.64×10^{-6}	$<5.60\times10^{-6}$	$<2.24\times10^{-7}$	$<1.12\times10^{-5}$	$<5.60\times10^{-7}$
1,483,307.6	3	07-29	11:16 - 13:29	$<1.23\times10^{-5}$	8.58×10^{-6}	1.26×10^{-5}	3.37×10^{-6}	$<6.13\times10^{-6}$	8.88×10^{-7}	$<1.23\times10^{-5}$	$<6.13\times10^{-7}$
1,701,843.1	4	07-30	07:01 - 08:28	$<1.22\times10^{-5}$	1.22×10^{-5}	4.56×10^{-6}	4.86×10^{-6}	$<6.08\times10^{-6}$	5.47×10^{-7}	$<1.22\times10^{-5}$	$<6.08\times10^{-7}$
1,709,555.3	5	07-30	10:07 - 11:38	$<1.24\times10^{-5}$	1.02×10^{-5}	$<3.11\times10^{-7}$	4.04×10^{-6}	$<6.21\times10^{-6}$	5.28×10^{-7}	$<1.24\times10^{-5}$	$<6.21\times10^{-7}$
1,698,083.8	6	07-30	13:08 - 15:07	$<1.19\times10^{-5}$	9.80×10^{-6}	$<2.97\times10^{-7}$	$<5.94\times10^{-7}$	$<5.94\times10^{-6}$	5.34×10^{-7}	$<1.19\times10^{-5}$	$<5.94\times10^{-7}$

05

Table II-B

Multi-Metals Test Summary
lb/hr Emissions

Run	Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Selenium	Silver
1	$<4.09\times10^{-3}$	2.88×10^{-3}	0.113	1.23×10^{-3}	$<2.05\times10^{-3}$	2.25×10^{-4}	$<4.09\times10^{-3}$	$<2.05\times10^{-4}$
2	$<2.77\times10^{-3}$	1.94×10^{-3}	1.38×10^{-2}	8.99×10^{-4}	$<1.38\times10^{-3}$	$<5.53\times10^{-5}$	$<2.77\times10^{-3}$	$<1.38\times10^{-4}$
3	$<3.11\times10^{-3}$	2.17×10^{-3}	3.19×10^{-3}	8.53×10^{-4}	$<1.55\times10^{-3}$	2.25×10^{-4}	$<3.11\times10^{-3}$	$<1.55\times10^{-4}$
4	$<3.25\times10^{-3}$	3.25×10^{-3}	1.22×10^{-3}	1.30×10^{-3}	$<1.62\times10^{-3}$	1.46×10^{-4}	$<3.25\times10^{-3}$	$<1.62\times10^{-4}$
5	$<3.47\times10^{-3}$	2.85×10^{-3}	$<8.69\times10^{-5}$	1.13×10^{-3}	$<1.74\times10^{-3}$	1.48×10^{-4}	$<3.47\times10^{-3}$	$<1.74\times10^{-4}$
6	$<2.97\times10^{-3}$	2.45×10^{-3}	$<7.42\times10^{-5}$	$<1.48\times10^{-4}$	$<1.48\times10^{-3}$	1.33×10^{-4}	$<2.97\times10^{-3}$	$<1.48\times10^{-4}$

Table III

PAH Test Summary

Run	Date	Time	gr/dscf	lb/hr
1	07-28	07:29 - 10:49	1.31×10^{-3}	0.351
2	07-29	07:15 - 08:56	1.82×10^{-3}	0.431
3	07-29	11:16 - 13:29	2.25×10^{-3}	0.576
4	07-30	07:01 - 08:28	5.37×10^{-4}	0.156
5	07-30	10:07 - 11:35	5.66×10^{-4}	0.152
6	07-30	13:08 - 15:07	2.19×10^{-4}	0.058

Table IV

Formaldehyde Test Summary

lost one run for VOC

Run	Date	Time	gr/dscf	ppm$_v$	lb/hr
1	07-28	07:29 - 10:45	0.0006	1.04	0.13
2	07-29	07:20 - 09:00	0.0005	0.86	0.11
4	07-30	07:06 - 08:32	0.0018	3.36	0.44

Table V

Volatile Organic Compound Concentration Summary

Parameter	Run 1 07-28	Run 2 07-29	Run 3 07-30	Run 4 07-30	Run 5 07-30
Concentrations:					
Methane, ppm	ND*	ND	ND	ND	ND
Styrene, ppm	4.73	ND	ND	1.78	ND
Butadiene, ppm	0.80	ND	4.67	7.89	6.25
Benzene, ppm	0.20	0.46	0.09	ND	ND
Ethyl Benzene, ppm	ND	0.05	0.03	ND	ND
Xylene, ppm	ND	ND	0.05	ND	ND
Toluene, ppm	ND	ND	ND	ND	ND
Emissions:					
Styrene, lb/hr	2.086	ND	NC	0.821	ND
Butadiene, lb/hr	0.183	ND	1.113	1.890	1.487
Benzene, lb/hr	0.066	0.139	0.031	ND	ND
Ethylbenzene, lb/hr	ND	0.021	0.014	ND	ND
Xylene, lb/hr	ND	ND	0.023	ND	ND

* ND = not detected

07

Table VI - A

THC, NO_x, CO, O_2 and CO_2 Test Summary

Run	Date	Time	O_2, %	CO_2, %	THC, ppm	NO_x, ppm	CO, ppm
1	07-28	11:38 - 11:50	14.8	3.4	1129.9	25.4	295.0
2	07-29	07:51 - 09:00	13.0	4.5	1472.5	33.5	802.0
3	07-29	11:22 - 13:36	13.8	4.2	1574.9	31.3	992.7
4	07-30	07:08 - 08:31	15.2	3.4	441.4	26.4	703.1
5	07-30	10:11 - 11:37	14.3	3.7	454.3	25.5	936.4
6	07-30	13:18 - 15:21	14.7	3.7	409.1	30.2	159.0

Table VI - B

THC, NO_x, CO Emission Summary

Run	THC, lb/hr	NOx, lb/hr	CO, lb/hr
1	76.76	4.95	35.00
2	91.48	5.97	87.00
3	97.05	5.53	106.82
4	31.21	5.35	86.81
5	32.26	5.19	116.13
6	28.86	6.11	19.59

how was this determined?

SO_2?
- monitor went down

08

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President
Executive Director

AN ASSOCIATION FOR THE DEVELOPMENT, IMPROVEMENT AND ADVANCEMENT OF ASPHALT PAVEMENT CONSTRUCTION

June 30, 1994

RECEIVED

JUL 01 1994

REGIONAL AIR POLLUTION
CONTROL AGENCY

Mr. Dane Marsee
P.A.P.C.A.
P. O. Box 972
451 W. Third St.
Dayton, Ohio 45422

Dear Dane:

As per our telephone conversation, I am forwarding a report entitled "Evaluation of Stack Emissions From HMA Facility Operations", Special Report 166, which represents a compilation of stack emissions data from hot mix asphalt facilities. This report represents several years of coordinated effort between the National Asphalt Pavement Association (NAPA) and the U. S. EPA Office of Air Quality Planning and Standards. As you know, the current federal AP-42 Guidance Document For The HMA industry is somewhat sketchy and has not been updated since 1986. For this reason NAPA is working with EPA to update that guidance document.

Special Report 166 includes data from nine to twenty-two facilities dependent upon the category of pollutant sampled and analyzed. Protocol for all NAPA testing and analyses was agreed upon with EPA prior to beginning the test program. All NAPA test data has been supplied to EPA and will be utilized in a future update of AP-42.

I have reviewed this report with Mr. Tom Rigo, manager of the Field Operations and Permit Section, Ohio EPA, and he informed me that the emission factors contained in the report were satisfactory for calculation a "Synthetic Minor" deferral of Title V Operating Permits. Please let me know if you have a question concerning any data from the report and I will try to provide an answer.

It was also my understanding from the meeting with Mr. Rigo that the tonnage limitation contained in the P.T.I. was "enforceable by the administration" for calculating a "Synthetic Minor" deferral of Title V operating permits if the P.T.I. had gone through the draft final process. When Mr. Rigo returns to his office next week I will contact him to try and clear the points you have raised on this issue.

Thank you for your time and talking to me on this matter, it is appreciated.

Sincerely yours,

Fred F. Frecker
President/Executive Director

FFF/js
Encl:

Typical Emissions Inventory Calculations - HMA Facility

Insert below choose equation

1. Use Table I to calculate annual emissions (tons pollutant/year):

$$\frac{\text{tons pollutant}}{\text{year}} = \begin{matrix}\text{Emission Factor}\\ \text{from Table I}\end{matrix} \times \text{maximum HMA produced } \left(\frac{\text{tons}}{\text{year}}\right) \times \frac{1 \text{ ton}}{2000 \text{ lbs}}$$

Example: Calculate annual formaldehyde emissions for a facility which produces up to 500,000 tons HMA per year.

$$\frac{\text{tons formaldehyde}}{\text{year}} = \text{Factor } .00108 \left(\frac{\text{lbs formaldehyde}}{\text{ton HMA}}\right) \times 500{,}000 \left(\frac{\text{tons HMA}}{\text{year}}\right) \times \frac{1 \text{ ton}}{2000 \text{ lbs}} = 0.27 \left(\frac{\text{tons}}{\text{year}}\right)$$

2. Use Table I to calculate hourly emissions (lbs pollutant/hour):

$$\frac{\text{lbs pollutant}}{\text{hour operation}} = \begin{matrix}\text{Emission Factor}\\ \text{from Table I}\end{matrix} \times \text{Average Production Rate } \left(\frac{\text{tons}}{\text{hour}}\right)$$

Example: Calculate formaldehyde emission rate for a facility which produces at the average rate of 350 tons HMA/hour.

$$\frac{\text{lbs formaldehyde}}{\text{hour operation}} = 0.00108 \left(\frac{\text{lbs formaldehyde}}{\text{ton HMA}}\right) \times 350 \left(\frac{\text{tons HMA}}{\text{hour}}\right) = 0.38 \left(\frac{\text{lbs}}{\text{hour}}\right)$$

3. Use Table II to convert emissions data for purposes of comparisons:

Example: Compare existing facility stack test data to emissions calculated in Example 2 above. Note: Assume existing stack test data reported 0.0024 gr/dscf (grains/dry standard cubic feet) and an average stack gas flow rate of 20,000 dscf/min (dry standard cubic feet per minute) for the facility above.

From Table II:

$$\frac{\text{lbs formaldehyde}}{\text{hour}} = \frac{\text{gr}}{\text{dscf}} \times \frac{\text{dscf}}{\text{min}} \times 0.00857$$

$$\frac{\text{lbs formaldehyde}}{\text{hour}} = 0.0024 \left(\frac{\text{gr}}{\text{dscf}}\right) \times 20{,}000 \left(\frac{\text{dscf}}{\text{min}}\right) \times 0.00857 = 0.41 \left(\frac{\text{lbs}}{\text{hour}}\right)$$

Conclusion: The stack test results in this example are slightly higher than emissions calculated in Example 2 above.

Table I - Average Emission Factors - Pounds of Pollutant/Ton HMA Produced (lbs/ton)

	NAPA Average	EPA Average	CAPA Average	CV Average	All Data Average
Criteria Pollutants					
Carbon Monoxide (CO)	0.303	0.490			0.345
Sulfur Oxides (SO_2)	0.0385	0.0537			0.0419
Nitrogen Oxides	0.0528	0.0550			0.0533
Total Hydrocarbons (non-methane)	0.0276	0.0562			0.0347
Particulate (PM-10)		0.00660			0.00660
HAPs (Clean Air Act List of 189)					
Polycyclic Aromatic Hydrocarbons					
PAH/PNA	0.000173	0.0000564	0.0000361	0.000266	0.000176
Specific Gaseous Compounds					
Benzene	0.000294	0.000316	0.0000815	0.000121	0.000186
Toluene	0.000252	0.00120			0.000464
Xylene	0.000282	0.00381			0.00107
Ethyl Benzene	0.000148	0.00315			0.000815
Formaldehyde	0.00203	0.00199	0.000281	0.000348	0.00108
Metal Compounds					
Antimony					
Arsenic		0.00000180	0.000000738	0.00000213	0.00000103
Beryllium		0.00000481	0.000000293		0.00000120
Cadmium		0.000000505	0.00000259	0.00000135	0.00000171
Chromium		0.00000631	0.00000352	0.0000138	0.00000617
Cobalt					
Lead		0.00000352	0.00000160	0.0000347	0.0000197
Manganese		0.0000116	0.00005153	0.000314	0.000204
Mercury			0.00000885	0.0000155	0.0000128
Nickel		0.0000107	0.00000257	0.000112	0.0000408
Selenium			0.000000170	0.00000590	0.00000132

Table II - How to Convert NAPA Emission Data to Other Units Frequently Used

To Calculate	ppm	lbs/hr	µg/m³	gr/dscf	lbs/hr	µg/m³
Multiply	gr/dscf	gr/dscf x dscf/min	gr/dscf	ppm	ppm x 10^{-6} x dscf/min	ppm x 10^{3}
	by	by	by	by	by	by
Note: All Factors Corrected to Standard Conditions of 68 °F & 1 atm (20 °C & 760 mm)						
Carbon Monoxide (CO)	1966	0.00857	2288088	0.000509	4.36	1.16
Sulfur Dioxide (SO_2)	860	0.00857	2288088	0.00116	9.97	2.66
Nitrogen Oxides (As NO_2)	1196	0.00857	2288088	0.000836	7.16	1.91
Total Hydrocarbons (THCs as methane)	3440	0.00857	2288088	0.00029	2.49	0.67
Benzene	705	0.00857	2288088	0.00142	12.16	3.25
Toluene	597	0.00857	2288088	0.00168	14.36	3.83
Xylene	518	0.00857	2288088	0.00193	16.53	4.41
Ethyl Benzene	518	0.00857	2288088	0.00193	16.53	4.41
Methane	3440	0.00857	2288088	0.000291	2.50	0.67
Formaldehyde	1835	0.00857	2288088	0.000545	4.67	1.25
Any Compound	$\frac{55037}{MW}$	0.00857	2288088	$1.817 \times 10^{-5} \times MW$	$0.156 \times MW$	$\frac{MW}{24.05}$

Other Conversion Factors @ 68 °F, 1 atm (20 °C, 760 mm)

1 lb = 7000 grains
1 lb = 453.6 grams
1 cf = 28.32 liters
1 lb-mole = 385.26 cf
1 m^3 = 1000 liters = 35.31 cf
1 gr/dscf = 2288 mg/m^3

1 gr/dscf = 1.9 lbs/1000 lbs air
1 gr/dscf = 1.9 lbs/13282 cf air
% Volume = ppm x 10^{-4}
1 gram = 15.43 grains
1 grain = 64.8 mg = 64800 µg
1 mg/m^3 = 0.000437 gr/dscf

$$ppm = mg/m^3 \times \frac{24.05}{MW}$$

$$1\ mg/m^3 = ppm \times \frac{MW}{24.05}$$

Nomenclature:

ppm = parts per million
gr/dscf = grains per dry standard ft^3
g = gram
l = liter
gr = grains
m^3 = cubic meters
atm = atmosphere
lbs = pound

lbs/hour = pounds per hour
dscf = dry standard ft^3 @ 68 °F & 1 atm
µg = microgram = 10^{-6} grams
mg = milligram = 10^{-3} grams
cf = cubic feet
MW = molecular weight
°F = farenheit
°C = centigrade

AREA SOURCE

Any building, structure, facility or installation (Stationary Source) which is a source of Hazardous Air Pollutants (HAPs) but is not a major source.

Example: *For Hazardous Air Pollutants*
Area Source = Stationary Source that emits
< 10 tons/year of single air toxic compound
< 25 tons/year of combination of air toxic compounds

ATTAINMENT/NON-ATTAINMENT

Each state is divided into Air Quality Control Regions for assessment of compliance with National Ambient Air Quality Standards. If a region is now meeting the standard for a particular pollutant within that region, it is labeled "Attainment" for that pollutant. If a region is not meeting the National Ambient Air Quality Standards, it is labeled "Non-Attainment" for that pollutant. The Clean Air Act of 1990 focuses on maintenance of attainment regions and the assurance of reasonable further progress toward "attainment" in regions where National Standards for air quality are not now being met.

BENZENE, TOLUENE, ETHYLBENZENE, XYLENE (BTEX)

A subset of petroleum-based Volatile Organic Compounds (VOCs) for which EPA defines a specific test procedure and analysis. These compounds appear on the list of 189 "Hazardous Air Pollutants" as defined in the Clean Air Act of 1990 and are thought to have adverse effects on human health. They are relatives of Polycyclic Aromatic Hydrocarbons (PAHs) but are more volatile and must be dealt with in separate test procedures.

BEST AVAILABLE CONTROL TECHNOLOGY (BACT)

This term normally has meaning for sources in regions of the country where National Ambient Air Quality Standards are consistently being met, i.e., attainment areas. It is the most common level of technology requirement and takes economics into account. Some emission standards have been developed for specific sources in specific regions of the country, and are intended to reflect back on BACT.

CARBON MONOXIDE (CO)

A gas which occurs in the atmosphere, and is a primary product of incomplete combustion. Mobile sources, such as cars, trucks, etc., combined with other sources concentrate the gases, particularly in urban areas. For this reason and its known health effects, Carbon Monoxide has been declared by Congress as a priority pollutant for regulation.

CLEAN AIR ACT (CAA)

The federal laws which provide the basic framework for regulating air pollution sources in the U.S. The Clean Air Act of 1990 refers specifically to the most recently amended version of the Clean Air Act.

EMISSIONS INVENTORY SURVEY

A process of tallying emissions of specific pollutants within a state or local air jurisdiction. It is mandated by the Clean Air Act of 1990 in specific situations. This data is used to form the baseline reference point for judging a state's implementation plan effectiveness and to document the sources of a particular pollutant which are subject to regulation.

EPA

The United States Environmental Protection Agency. This agency is the official agency at the federal level charged with administration of the Clean Air Act and other environmental laws.

FORMALDEHYDE

Formaldehyde is a Volatile Organic Compound and is a known product of incomplete combustion, especially where combustion zone temperatures are lower.

HAZARDOUS AIR POLLUTANTS (HAPs, sometimes referred to as Air Toxics)

A list of chemicals which the Clean Air Act defined as Hazardous Air Pollutants based upon a finding that suggests these chemicals either participate in adverse human health effects or adverse environmental effects. The initial list of 189 HAPs is to be extended based upon future findings by EPA. Many of the chemicals are closely linked with petroleum and coal derivatives and products of combustion. For this reason, HMA Manufacturing was one of 174 source categories named by EPA as a target for future regulation.

LOCAL AIR AUTHORITY

Refers to some county or city air pollution regulatory authorities that have been delegated authority to administer provisions of the Clean Air Act by the state and/or the U.S. EPA.

LOWEST ACHIEVABLE EMISSION RATE (LAER)

A term which has meaning under the non-attainment provisions of the Clean Air Act. Its application is intended to reflect the most stringent level of control for affected sources and allows no consideration for economics. The implications are that emission standards would reflect the best 12% experience in reducing emissions for the affected industry and would usually require offsetting reductions in emissions from other sources in order to comply.

MAJOR SOURCE

A term (referenced many times in the Clean Air Act of 1990) used to define a specific annual threshold quantity for a specific pollutant. If a source emits more than the threshold quantity, it is termed a major source.

The tonnage threshold is <u>not</u> the same for all pollutants and all situations.

Example:

- *Air toxics - Major Source $\geq$ 10 tons/year of a single air toxic*
  $\geq$ 25 tons per year of a combination of air toxics

- *Attainment areas where National Ambient Air Quality Standards are consistently met*
  - Major source = 100 tons/year or more (PM-10, CO_2, SO_x, NO_x, Lead, Ozone, CO)

MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY (MACT)

A term which has meaning when applying some provisions of the Clean Air Act, specifically Air Toxics. Must use technology that has been proven to do the best job or meet the specified emissions standards. Economics are <u>not</u> taken into account. Emission standards are to reflect back on MACT when proposed.

METAL COMPOUNDS

A material which contains any one of eleven specifically named metals as part of the chemical structure of that material. These metals were identified on the list of 189 "Hazardous Air Pollutants" listed in the Clean Air Act of 1990. Specifically, the list includes: Antimony (Sb), Arsenic (As), Beryllium (Be), Cadmium (Cd), Chromium (Cr), Cobalt (Co), Lead (Pb), Manganese (Mn), Mercury (Hg), Nickel (Ni), and Selenium (Se).
These metals are often associated with combustion of oil and coal.

MOBILE SOURCE

Automobiles, trucks and airplanes, and non-road vehicles such as construction equipment, farm machinery, lawn equipment, forklifts, marine vessels, and locomotives which emit a pollutant for which there is a national standard.

NATIONAL AMBIENT AIR QUALITY STANDARDS (NAAQS)

To protect public health and public welfare, the Clean Air Act mandates atmospheric standards for six pollutants: Particulate Matter (PM-10), Sulfur Oxides (SO_2), Nitrogen Oxides (NO_2), Ozone (O_3), Carbon Monoxide (CO), and lead.

NITROGEN OXIDES (NO_x)

An air pollution term applied to a class of Nitrogen-bearing gases that are a primary product of combustion. The gases are known to be a primary factor in the formation of smog and acid rain. For these reasons, Nitrogen Oxides have been listed by Congress as a priority pollutant for regulation. Usually expressed as Nitrogen Dioxide (NO_2).

ORGANIC COMPOUND

Chemical compounds which contain carbon. Coal and oil-based products are rich in carbon.

OZONE (O_3)

A gas which is known to be a primary component of smog within a 7-10 mile zone above the earth's surface. Ozone in the atmosphere is produced through a complex set of chemical reactions involving other gases (Nitrogen Oxides and Volatile Organic Compounds) and sunlight. Because of its concentration, particularly in urban areas, Ozone has been declared by Congress to be a priority pollutant for regulation. Since Ozone (smog) is a product of a reaction in the atmosphere, the focus of regulation is on gases which react to form O_3 i.e., Volatile Organic Compounds (VOCs) and Nitrogen Oxides (NO_x).

PARTICULATE MATTER (PM-10)

Particles which are captured in a specifically defined EPA test procedure and analysis, and have an average diameter of 10 microns or less. These are components of dust, smoke, fumes etc. Because these particles are viewed to be most respirable and have an impact on human health, PM-10 has been declared a priority pollutant for regulation under the Clean Air Act.

POLYCYCLIC AROMATIC HYDROCARBONS (PAHs) OR POLYNUCLEAR AROMATICS (PNAs)

Two air pollution terms used synonymously to describe a class of organic compounds that are largely associated with combustion and petroleum-based products. Because they tend to condense at atmospheric temperatures, they diffract light and are often associated with blue haze. They are sometimes referred to as semi-Volatile Organic Compounds. These materials were targeted by the Hazardous Air Pollutant provisions of the Clean Air Act due to the belief that they are associated with adverse health effects. The class includes at least 17 different compounds which have been specifically identified. Termed "hazardous", these compounds are targets for future regulation. EPA specifies a test procedure for these compounds.

POLYCYCLIC ORGANIC MATTER (POM)

A term applied to a class of organic compounds, largely associated with combustion and petroleum products, that condense as they are emitted into the atmosphere. Because these gases condense in the atmosphere and diffract light, they are often observed as blue haze. They are sometimes referred to as semi-Volatile Organic Compounds. The regulation focus is on a subset of 17 of these compounds, Polycyclic Aromatic Hydrocarbons (PAHs) or Polynuclear Aromatics (PNAs). For air pollution control purposes, the terms are often used synonymously, i.e., POMs, PAHs, or PNAs. These chemicals are often associated with adverse health effects and many are thought to be cancer causing. For this reason these compounds are labeled in the Clean Air Act as Hazardous Air Pollutants.

POTENTIAL TO EMIT

A term used in emissions inventory processes to define the basis for calculating emissions from a source. It normally sets the number of hours of operation to 8,760 hours of operation, 365 days, 24 hours per day for emissions calculations. Indications are that this is not a federal mandate and may be subject to state or local interpretation.

REASONABLY AVAILABLE CONTROL TECHNOLOGY (RACT)

This term has meaning under the Clean Air Act in regard to the upgrade of existing facilities where required to assist in meeting National Ambient Air Quality Standards in non-attainment areas. It is usually the easiest level of technology to meet, but could vary from one location to another, dependent upon the severity of the non-attainment problem. In some areas, such as southern California, it could be very stringent, while in others, it may be much more lenient.

STATE IMPLEMENTATION PLAN (SIP)

The document submitted to EPA by the Governor of each state which details the state's plan for administering and enforcing the provisions of the Clean Air Act. The Clean Air Act requires approval of this plan by EPA. Upon approval, a state is delegated authority to administer specific provisions of the Clean Air Act. There are at least two reasons for a state to submit a plan: potential loss of federal grant money, and the threat of federal intervention.

STATIONARY SOURCE

Any building, structure, facility, or installation which emits, or has the potential to emit any air pollutant.

SULFUR OXIDES (SO_x)

An air pollution term applied to a class of gases which are made up of sulfur and oxygen in different combinations. It is usually associated with the burning of fuels which contain sulfur, i.e., diesel, coal, #6 fuel oil, kerosene, etc. Because it is observed in the atmosphere in large quantities and is viewed to have an effect on human health, vegetation, and acid rain, it has been labeled a priority pollutant for regulation by Congress in the Clean Air Act. Usually expressed as Sulfur Dioxide (SO_2).

TOTAL HYDROCARBONS (THCs)

An air pollution term often used to describe gases (organic compounds) emitted from combustion processes. It is often used synonymously with the term Volatile Organic Compounds (VOCs) in non-combustion processes. This may vary dependent on local interpretation.

TOTAL ORGANIC COMPOUNDS (TOCs)

An air pollution term often used to describe gases (organic compounds) in the emissions from a manufacturing process. It is often used synonymously with the term Volatile Organic Compounds (VOCs).

VOLATILE ORGANIC COMPOUNDS (VOCs) - sometimes used synonomously with THCs and TOCs

An air pollution term used in the Clean Air Act to describe gases or vapors which are typically emitted from combustion or manufacturing processes and also which are known to participate in the chemical formation of OZONE in the presence of sunlight and other gases (e.g., smog). EPA specifies a test method for capture and analysis. Since mobile sources such as autos and trucks are a significant source of VOCs, urban centers are likely to be focal points for additional regulation.

OhioEPA

State of Ohio Environmental Protection Agency

P.O. Box 1049, 1800 WaterMark Dr.
Columbus, Ohio 43266-0149
(614) 644-3020 **Fax** (614) 644-2329

JAN 23 1991

MEMORANDUM

TO: Fred Klingelhafer, SEDO

FROM: Chris C.W.A. Armstrong, Legal

SUBJECT: **PORTABLE ASPHALT PLANTS - PROPOSED PILOT PROGRAM**

DATE: January 14, 1991

Issue

Can a pilot program allowing the following be considered within OAC Rule 3745-31-03 or any other rule?

1. General notification by an asphalt company of the various sites where portable plants are to be located (OEPA determines acceptability of these various sites with each such acceptance being valid for three (3) years);

2. General notification by an asphalt company of the various portable plants that may be moved to these listed and accepted sites; and

3. Relocation of a listed portable plant to a listed and accepted site would be deemed acceptable with a notification to the Director of this relocation within ten (10) days of the relocation.

Discussion and Conclusion

Although the pilot program may provide administrative efficiencies, it appears that the pilot program fails to meet the requirement of OAC Rule 3745-31-03(A)(1)(n)(iii). The pilot program contains general notice of the site and portable plant involved through the original listing of these two groups. In the pilot program the specific notice of intent to relocate a particular portable asphalt plant is required ten (10) days prior to the actual relocation.

Under OAC Rule 3745-31-03(A)(1)(n)(iii), the asphalt company must provide:

> proper notice of intent to relocate the source to the Director within a minimum of thirty (30) days prior to the scheduled relocation.

The use of the term "scheduled relocation" appears to contemplate that a specific portable asphalt plant will be moved to a specific OEPA approved site. The notice of intent to relocate the plant to this particular site must be provided to the Director within thirty (30) days.

The pilot program attempts to satisfy the notice requirement by first providing a general notice list of the asphalt plants to be relocated and second by providing a general notice list of the sites where the plants may be relocated to. Then, a more specific notice of intent to relocate is required to reach the Director ten (10) days prior to the specific relocation.

Although the pilot program eventually satisfies the requirement of specifically identifying the asphalt plant and where it is to be operated, it does not do so until ten (10) days before the specific relocation. OAC Rule 3745-31-03(A)(1)(n)(iii) requires specific notice of intent to relocate "within a minimum of thirty (30) days."

Because the general notice does not specifically identify the particular asphalt plant and where it is going to operate, the general notice as provided for in the pilot program does not satisfy OAC Rule 3745-31-03(A)(1)(n)(iii). In order for the pilot program to work within OAC Rule 3745-31-03(A)(1)(n)(iii), it appears that the rules must be amended to allow for the ten (10) day notification period.

Another basis upon which the pilot program may operate is OAC Rule 3745-31-03(A)(5). This rule allows the Director (at the Director's discretion and in writing) to exempt a source from obtaining a PTI for a period of up to six (6) months "for purposes of research and development of more effective prevention or control of air pollutant emissions or of more efficient combustion of coal."

It appears to me that a pilot program emphasizing changes in its notification process does not constitute "research and development" for purposes of OAC Rule 3745-31-03(A)(5). The term "research and development" seems to include technological changes being tested rather than changes of notification, which appear to be changes of procedure requiring neither research nor development.

Even if it can be alleged that changes in a particular notification program constitute "research and development" designed to lessen air pollutant emissions, there remains the requirement that the Director approve of this action in writing. Approval of the pilot program may be obtained from the Director just as easily by PTI rule changes without having to rely upon a questionable legal theory that such a pilot program constitutes "research and development of more effective prevention or control of air pollutant emissions."

In addition, it is my understanding that such a basis (the use of OAC Rule 3745-31-03(A)(5)) has not been used to allow the implementation of a pilot program. Therefore, it is my conclusion that the pilot program as proposed does not satisfy OAC Rules 3745-31-03(A)(1)(n)(iii) or 3745-31-03(A)(5), and that the appropriate method of implementing this pilot program would be to revise or add rules allowing it.

CWA/dms
cc: Bill Hayes, Legal Supervisor
Bob Hodanbosi, DAPC

inter-office communication

to: LAA Directors/D.O. Unit Supervisors date: June 11, 1990

from: Bob Hodanbosi, Manager, AQM&P

subject: Fuel Oil Usage at Asphalt Plants

This is a reminder that any new permit to install applications for asphalt plants should indicate the type of fuel used at the facility. If fuel oil is to be utilized, be sure to obtain the necessary applications for the storage tanks of fuel oil. Also, any asphalt storage tanks should be covered by permit. The resultant sulfur dioxide emissions from the combustion of fuel oil should also be included on the New Source Coding Form for modeling. If there are existing facilities, without storage tank permits, the company should be asked to submit applications in order to obtain the required air permit.

RH/mmc

RECEIVED
JUN 14 1990
Ohio Environmental Protection Agency
CENTRAL DISTRICT OFFICE

Moderate Non-Attainment Areas

Ohio
Ozone Non-Attainment Areas

@5/7/96

Sulfur Dioxide
Non-Attainment Sub-County Narrative
to Supplement the Map
Non-Attainment, Primary Standards

Coshocton

Franklin Township

Cuyahoga

Townships of Olmsted and Riveredge
The Cities of Bay Village, Westlake, North Olmsted, Olmsted Falls, Rick River, Fairview Park, Berea, Middleburg Hts., Strongsville, North Royalton, Broadview Hts., and Brecksville - Attainment. Remainder of Cuyahoga County is primary non-attainment.

Jefferson

The Cities of Steubenville and Mingo Junction
The Townships of Steubenville, Island Creek, Cross Creek, Knox and Wells

Lake

The Cities of Eastlake, Timberlake, Lakeline, Willoughby (north of U.S.20), and Mentor (north of U.S. 20 and west of S.R. 306).

Lorain Area Bounded on the north by the Norfolk and Western R.R. tracks, on the east by S R 301(Abbe Road), on the south by S R 254, and on the west by Oberlin Road.

Lucas

The area east of Route 23 and west of eastern boundry of Oregon Township

OHIO—SULFUR DIOXIDE (SO_2)

Designated area	Does not meet primary standards	Does not meet secondary standards	Cannot be classified	Better than National Standards
* * *	*	*	*	
Summit:				
Area bounded by the following lines—North—Interstate 76, East—Route 93, South—Vanderhoof Rd., West—Summit County line.				X
Area bounded by the following lines—North—Bath Rd., (48. east to Route 8, Route 8 north to Barlow Rd., Barlow Rd east to county line, East—Summit/Portage County line, South—Interstate 76 to Route 93, Route 93 south to Route 619, Route 619 east to county line, West—Summit/Medina County line.	X[a]			
The remainder of summit County				X[a]
* * *	*	*	*	

* * *
[a] This area remains undesignated at this time as a result of a Sixth Circuit Court remand.
[a] This area was not affected by the court remand.

Summit

Non-Attainment Secondary Standards

Gallia

Addison Township

Although this map reflects the entire county as designated non-attainment, the actual non-attainment designations are on a sub-county basis. Consult attachment.

Non-attainment counties Secondary

Non-attainment counties Primary

Sulfur Dioxide

PM10 NONATTAINMENT AREAS

CUYAHOGA COUNTY - Entire county

JEFFERSON COUNTY - The area bounded by Market Street (State Route 43) from the West Virginia/Ohio border west to Sunset Blvd. (U.S. Route 22), Sunset Blvd. west to the Steubenville Township/Cross Creek Township boundary, the township boundary south to the Steubenville Corporation limit, the corporation boundary east to State Route 7, State Route 7 south to the Steubenville Township/Wells Township boundary, the township boundary east to the West Virginia/Ohio border, and north on the border to Market Street.

Williams
Fulton
Lucas
Ottawa
Lake
Ashtabula
Defiance
Henry
Wood
Sandusky
Erie
Lorain
Cuyahoga
Geauga
Trumbull
Paulding
Putnam
Hancock
Seneca
Huron
Medina
Summit
Portage
Mahoning
Van Wert
Allen
Wyandot
Crawford
Richland
Ashland
Wayne
Stark
Columbiana
Mercer
Auglaize
Hardin
Marion
Morrow
Holmes
Carroll
Jefferson
Knox
Tuscarawas
Harrison
Shelby
Logan
Union
Delaware
Coshocton
Darke
Miami
Champaign
Licking
Guernsey
Belmont
Clark
Madison
Franklin
Muskingum
Preble
Montgomery
Greene
Fayette
Pickaway
Fairfield
Perry
Morgan
Noble
Monroe
Washington
Butler
Warren
Clinton
Hocking
Ross
Athens
Vinton
Hamilton
Clermont
Highland
Pike
Jackson
Meigs
Brown
Adams
Scioto
Gallia
Lawrence
Nonattainment

PM10

ENTIRE STATE OF OHIO IS ATTAINMENT FOR

NITROGEN DIOXIDE

LEAD

CARBON MONOXIDE

From: Tom Rigo
To: Cesar Zapata; CURT MARSHALL; Dale Aleman; Dennis Bush; Don Waltermeyer; Frank J. Markunas; Frank.Stoy@does.hamilton-co.org; Fred Klingelhafer; Harry.Schwietering@does.hamilton-co.org; Isaac Robinson; Jim Orlemann ; John Curtin; Karen Granata; Mark Vilem; Michael.Kramer@does.hamilton-co.org; Mike Hopkins ; Mike Riggleman; Misty Parsons; Phil Hinrichs; Phillip_thompson@epa.ohio.gov; Ron Hancher; Samir Araj; Tim Wilson
Date: 2/7/00 11:25AM
Subject: BAT terms and conditions **IMPORTANT !!!!**

Until further notice, please **immediately** direct your permit review staff for both Title V and bifurcated PTIs to begin to place any BAT terms and conditions on the State/federal side of the permits. Beginning today 2/7/00, we will not accept any new draft Title V or draft bifurcated PTIs with the BAT requirements on the State-only side of the permit. This should make the permits less complicated because if the BAT is more stringent than an associated OAC rule requirement, it will only be necessary to cite the more stringent BAT requirement on the State/federal side of the permit. Also, for Title V permits that were drafted prior to June 18, 1999, those permits can proceed to final issuance without having to revise the drafts by moving the BAT requirements over to the State/federal side of the permit. We are still negotiating with USEPA on the possibility of not having to revise draft permits after the June 18 date. We should know in the near future whether we have been successful. However, at this time, your staff should focus on preparing initial Title V draft permits and processing those Title V's that were drafted before June 18, 1999 to proposal then final issuance. Should you have any questions, please feel free to contact Jim Orlemann, Mike Hopkins or me.

In advance, thank you for immediately distributing this important guidance to your permit review staff.
Tom

CC: Bob Hodanbosi ; Jeanne Mallett; Joe Koncelik

June 18, 1999

Robert F. Hodanbosi, Chief
Division of Air Pollution Control
Ohio Environmental Protection Agency
122 South Front Street
P. O. Box 1049
Columbus, Ohio 43266-1049

Dear Mr. Hodanbosi:

For the past several months, we have had discussions with you and your staff about inconsistencies with incorporating provisions of your State Implementation Plan (SIP) as applicable requirements in operating permits under your Title V Permit Program. More specifically, we are concerned that the Best Available Technology (BAT) requirements, nuisance regulation, and toxics policy which are contained in the SIP and/or SIP-approved permits, are not identified as federally enforceable
terms in your Title V permits.

On March 31, 1999, John Seitz, Director of the U. S. Environmental Protection Agency's (EPA) Office of Air Quality Planning and Standards, wrote a letter to the California Air Pollution Control Officers Association in response to their questions regarding federal enforceability. In that letter, Mr. Seitz stated our view that "all provisions contained in an EPA-approved SIP and all terms and conditions in a permit issued under any SIP-approved permit program are...federally enforceable.... [A]ll such terms and conditions are also federally enforceable " applicable requirements" that must be incorporated into the Federal side of a Title V permit." This position was reiterated in a May 20, 1999, letter to you from Mr. Seitz.

BAT is a requirement of State's Permit to Install (PTI) program, approved into the Ohio SIP. The PTI program serves, in part, to meet the general (or "minor") new source review requirements of section 110(a)(2)(C) of the Clean Air Act (Act), which requires SIPs to include a program for the regulation of the modification and construction of any stationary source as necessary to assure that national ambient air quality standards are achieved. Specific BAT limitations for individual sources are established in specific PTIs. Because BAT terms and conditions are created under the PTI program, which is in turn contained in the Ohio SIP, they are federally enforceable. As requirements under the SIP they also are "applicable requirements" within the meaning of the Act section 504(a)
and 40 CFR - 70.2 and, therefore, must reside in the Federal and State enforceable section of the Title V permit. Similarly, the terms and conditions implementing Ohio's nuisance regulation and toxics policy are included in the SIP and/or a SIP-approved permit and thus are considered federally enforceable applicable requirements for Title V purposes. They should be reflected as such in the Title V permit.

Section 505(b)(1) of the Act calls upon EPA to object to any proposed permit that is not in compliance with applicable requirements, including the requirements of a SIP. Accordingly, Title V permits which are issued with BAT, nuisance, and toxics policy terms and conditions that are misrepresented as State-only enforceable are subject to EPA objection.

It is our understanding that you intend to submit a SIP revision package requesting removal of the BAT requirements, thus making them State enforceable only. We ask that, prior to this resource intensive effort, you make all necessary assurances that this action will meet all of the planning requirements of the Act, including both specific and general requirements intended to assure the attainment and maintenance of the National Ambient Air Quality Standards and the prevention of significant deterioration of air quality. The BAT program appears to be integral to Ohio's plan for meeting many of these requirements. In addition, sections 110(l) and 193 of the Act are "antibacksliding" provisions that prohibit the approval of a SIP revision that would interfere with any applicable requirement of the Act and, in the case of nonattainment areas, require that control requirements be replaced by measures of ensuring equal or greater emissions reductions. Thus, before we could approve the removal of the BAT program from the SIP, you must demonstrate that removal of BAT would not adversely affect the various statutory requirements that BAT addresses. This will also enable our review process to be done in a timely fashion. In addition, if you choose
to make the nuisance regulation and toxics policy State enforceable only, we ask that this be included as part of your SIP revision package.

Please keep in mind that the removal of these provisions from the SIP will not affect the continuing Federal enforceability of existing PTIs. As noted above, either inclusion in the SIP or in a permit issued pursuant to a SIP-approved program renders a requirement federally enforceable. Here, the BAT requirements are contained in PTIs issued pursuant to Ohio's SIP-approved PTI program. Therefore, for sources with existing PTIs containing BAT, the BAT requirement still would have to be included on the federally enforceable side of the Title V permit. This is true also for nuisance and state toxics requirements contained in existing PTIs. We continue to have the authority to enforce BAT and the other provisions at these sources until appropriate regulatory steps are taken.

We look forward to continuing to work with you on this issue. If you have any questions or wish to discuss this issue further, please call Genevieve Damico, of my staff, at (312) 353-4761.

Sincerely yours,

/s/

Stephen Rothblatt, Chief
Air Programs Branch

Ohio EPA
Ohio Environmental Protection Agency
Division of Air Pollution Control

INTER-OFFICE COMMUNICATION

TO: Distribution - By mail and E-Mail

FROM: Mike Hopkins, Manager, AQM&P and Jim Orlemann, Manager, Engineering through Bob Hodanbosi, Chief, DAPC

DATE: July 23, 1999

RE: Location of BAT Terms and Conditions

We recently had several discussions with U.S. EPA concerning the proper location of BAT-based emission limits and associated terms and conditions. It is U.S. EPA's belief that BAT requirements should be included on the State and Federally Enforceable side of our permits. Their reasoning is that the requirement for BAT in rule 3745-31-05 is currently included in an approved part of the State Implementation Plan (SIP). Since it is included in the SIP, it is federally enforceable.

We agree that BAT is currently in the SIP. However, it was inadvertently included in our February 29, 1996 SIP submittal. It was included before U.S. EPA decided that this was an important issue. We are preparing a SIP revision to remove references to BAT from the SIP. We expect this SIP revision to be transmitted to U.S. EPA within a couple of weeks. It is likely to take several months before U.S. EPA can act on this request.

Because (1) the BAT provisions are not a required part of the SIP, (2) we are expecting to remove the BAT provisions from the SIP, and (3) we do not want to waste a lot of time changing permits in the future, we believe the BAT provisions should continue to be placed on the State Enforceable side of all PTI and Title V permits.

Since U.S. EPA disagrees with this approach, they will adversely comment on any draft PTI issued. When U.S. EPA does adversely comment during the comment period for a PTI, we should then ask the permittee if it is acceptable for us to move the BAT requirements to the State and Federally Enforceable side of the permit. If they agree, then make the change in the final action recommendation. If the company disagrees and wants to fight U.S. EPA on this issue, please contact Mike Hopkins for further discussion.

U.S. EPA may also comment adversely on Title V permits. We currently plan to continue to process Title V permits as we have -- in accordance with the March 21, 1997 IOC from myself and Jim Orlemann (copy attached).

If you have any questions, please call your Title V or New Source Review contact at (614) 644-2270.

MH/ \ioc\BATLocation.wpd

Distribution: All LAA/DO Unit Supervisors
CO permit staff
NSR permit staff

OhioEPA

Ohio Environmental Protection Agency
Division of Air Pollution Control

INTER-OFFICE COMMUNICATION

TO: Distribution

FROM: Mike Hopkins, Manager, DAQM&P and Jim Orlemann, Manager, Engineering through Bob Hodanbosi, Chief, DAPC

DATE: March 21, 1997

RE: Location of Permit to Install limitations/requirements in Title V permits

---

The Division of Air Pollution Control has recently fielded many questions concerning the proper location of PTI limitations/ requirements within Title V permits. The purpose of this memo is to clarify which Permit to Install limitations/requirements belong on the federal side of a Title V permit and which limitations/requirements belong on the state side of a Title V permit.

In the past it was thought that all PTI limitations/requirements from permits issued as draft must go on the federal side of the Title V permits. We no longer believe this is true. Instead, you should use the following rules when deciding the location of PTI limitations/requirements.

A. The following PTI limitations/requirements <u>and all associated terms and conditions</u> (monitoring, recordkeeping, reporting, and testing) must go on the federal side of a Title V permit.

1. New Source Performance Standards (NSPS).

2. National Emission Standard for Hazardous Pollutants (NESHAP).

3. Maximum Achievable Control Technology (MACT) standards.

4. Short term emission limits (lb/hr, lb/day, lb/month, lb/rolling 12-month, lb/rolling 365 day, lb/gallon, etc.) developed to restrict the potential to emit for synthetic minors.

5. Short term operational restrictions (gallons/hr, gallons/day, gallons/month, gallons/rolling 12-month, gallons/rolling 365-day, etc.) developed to restrict the potential to emit for synthetic minors.

6. Emission limits (other than (B)(1) below) specified in or derived from rules in the federally approved State Implementation Plan (SIP).

7. Emission limits or control requirements specified to comply with Best Available Control Technology (BACT) requirements for Prevention of Significant Deterioration (PSD).

8. Emission limits or control requirements specified to comply with Lowest Achievable Emission Rate (LAER) requirements.

9. Emission limitations, operational restrictions or shutdown requirements for emissions units that are reducing emissions for netting purposes.

10. Ambient monitoring terms required by one of the above-mentioned regulations.

11. Emissions limitations, control requirements or operational restrictions for an emissions unit that have been developed specifically to prevent a violation of the National Ambient Air Quality Standards by that emissions unit.

B. PTI limitations/requirements not listed above should be placed on the State Enforceable side of Title V permits, including:

1. Any limitation developed to comply with Best Available Technology (BAT) requirements.

2. Any ton/year emission limitation.

3. Any limitation based upon the application of the DAPC's "Air Toxic Policy."

If you have any questions, please contact Jim Orlemann or Mike Hopkins.

MH/JO/ \ioc\limit1.wpd

Distribution:

All DO/LAA Air Unit Supervisors
All DAPC Section Managers
Jenny Tiell, Dir. Office
Safaa El-Oraby, DAPC
Jeanne Mallett, Legal
Misty Parsons, DAPC
Alan Lloyd, DAPC

Memo

To: Mike Hopkins, Jim Orlemann, Tom Rigo, Jeanne Mallett

From: Bob Hodanbosi

Date: June 14, 1999

Subject: Letter from U.S. EPA

Attached is a letter from U.S. EPA to STAPPA/ALAPCO that addresses federal enforceability NSR/PSD Lookback, and supersession. This interpretation is what Region V is using to require BAT to be on the federal side of the Title V permit. At the STAPPA meeting, John Seitz stated that he did not believe this letter would have much impact and expected permit issuance to continue to progress.

Attachment

BH/alp

May 20, 1999

Mr. Robert Hodanbosi
Mr. Charles Lagges
STAPPA/ALAPCO
444 North Capitol Street, NW
Washington, DC 20001

Dear Messrs. Hodanbosi and Lagges:

I am writing in response to your May 15, 1998 and December 11, 1998 letters. Your May 15, 1998 letter addressed the Environmental Protection Agency's (EPA's) use of its authority to object to permits proposed by State permitting authorities under the Clean Air Act's (CAA's or the Act's) title V operating permit program and focused primarily on interface issues between title V and title I [or new source review (NSR)] of the Act. You expressed concern that EPA's use of its review authority leading to comments and objections to proposed permits was impacting permit issuance rates. Your letter also detailed a number of concerns and disagreements with the positions underlying certain objections and comments that have been made by EPA Regions. In your December 11, 1998 letter, you raised concerns regarding maximum achievable control technology (MACT)/title V interface issues.

As you are aware, EPA has listened to your concerns and thoroughly evaluated your views. Since receipt of your letters, there has been continued dialogue on the many issues raised in the letters among permitting authorities, Regions, and EPA Headquarters. Examples include our July 8, 1998 meeting, monthly STAPPA/ALAPCO title V committee calls, Regional/State title V workshops, specialty meetings such as the MACT/title V issues meeting, and, most recently, the STAPPA title V workshop in Dallas. In these interactions we have heard each other's views and, in most cases, reached some common understanding of the issues and solutions. In fact, the number of objection letters has dropped significantly over the past few months. Through the efforts of the permitting authorities and Regions, we have become increasingly successful at resolving specific permit issues.

I believe it is important to share EPA's views on the issues your letters highlighted. Thus, Enclosure A sets forth EPA's policy on the title I/title V interface issues and concerns raised in your May 15, 1998 letter. Enclosure B provides our present understanding of the

MACT-title V interface issues raised in your December 11, 1998 letter. I seek your thoughts on these MACT-title V issues with a view toward resolving any disagreements we may have as soon as possible.

Two issues in your May 15 letter that do not readily fall into either attachment are periodic monitoring and the State implementation plan (SIP) backlog. Our views on these follow.

Periodic Monitoring

We believe that the issuance of the September 15, 1998 periodic monitoring guidance addressed your questions on this issue. Presently, we are working on the Periodic Monitoring Technical Reference Document. This document will provide general technical guidance for complying with the title V periodic monitoring requirements and will present specific examples of monitoring that satisfy these requirements. This document is primarily targeted toward the plant managers and operators who will design and operate such monitoring appropriate to site-specific situations. The document will also be helpful for permitting authorities and permit writers who review and supplement or prescribe monitoring for individual permits. A draft of this document was made available for public review via EPA's website on April 30.

SIP Backlog

The EPA understands that the SIP backlog is limited primarily to California. Budgetary constraints in FY 1999 will hamper our ability to completely eliminate the backlog in the near term. However, Region IX has redirected significant resources within its air program to address this issue during FY 2000. Region IX will continue to work closely with the California Air Resources Board and local air districts to prioritize their crucial SIP submittals for expeditious action by EPA in order to minimize the impact on title V permit issuance. The Region is also actively exploring additional mechanisms to expedite SIP actions.

I believe that the responses set forth in this letter and the enclosures will be helpful in informing you of the principles that will guide future EPA action in reviewing draft and proposed title V permits. Together we can move forward to fulfill the recent Agency goal of issuing all permits by January 2001. Whether and how EPA applies these policies in any particular permit proceeding will depend upon the specific review undertaken for particular permits. As you develop permits over the coming months, I ask that you work with our Regional Offices on implementation and involve management where you feel it necessary. Finally, the responses in this letter are not binding on any party, do not represent final Agency action, and cannot be relied upon to create any legal rights or obligations enforceable by any party.

I appreciate your interest in identifying issues you feel affect the successful implementation of the title V program. The upcoming STAPPA/ALAPCO meeting in May might provide a good forum to discuss EPA's positions on these matters.

Sincerely,

/s/

John S. Seitz
Director
Office of Air Quality Planning
and Standards

Enclosures

cc: Bill Becker, STAPPA/ALAPCO
Bruce Buckheit, EPA/OECA
Robert Colby, Chattanooga-Hamilton County, Tennessee
Alan Eckert, EPA/OGC
Bliss Higgins, Louisiana
Director, Office of Ecosystem Protection, Region I
Director, Division of Environmental Planning and Protection, Region II
Director, Air Protection Division, Region III
Director, Air, Pesticides, and Toxics Management Division, Region IV
Director, Air and Radiation Division, Region V
Director, Multimedia Planning and Permitting Division, Region VI
Director, Air, RCRA, and Toxics Division, Region VII
Assistant Regional Administrator, Office of Partnerships and Regulatory Assistance, Region VIII
Director, Air Division, Region IX
Director, Office of Air, Region X

bcc: Rich Biondi, EPA/OECA
Karen Blanchard, EPA/OAQPS
Tom Curran, EPA/OAQPS
Jocelyn deGrandpre, EPA/OGC
Anna Duncan, EPA/OAQPS
Bill Harnett, EPA/OAQPS
Steve Hitte, EPA/OAQPS
Greg Jaffe, EPA/OECA
Dave Painter, EPA/OAQPS
Racqueline Shelton, EPA/OAQPS
Mike Trutna, EPA/OAQPS
John Walke, EPA/OGC
Dave Wallenberg, STAPPA/ALAPCO
OPG Staff, EPA/OAQPS

OAQPS/ITPID/OPG:SHitte:pfinch:MD-12:541-5281:5/3/99
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ENCLOSURE A

FEDERAL ENFORCEABILITY

Title V and the part 70 regulations are designed to incorporate all Federal applicable requirements for a source into a single title V operating permit. To fulfill this charge, it is important that all Federal regulations applicable to the source such as our national emission standards for hazardous air pollutants, new source performance standards, and the applicable requirements of SIP's and permits issued under SIP-approved permit programs, are carried over into a title V permit.[1] All provisions contained in an EPA-approved SIP and all terms and conditions in SIP-approved permits are already federally enforceable (see 40 CFR § 52.23).[2] The enactment of title V did not change this. To the contrary, all such terms and conditions are also federally enforceable "applicable requirements" that must be incorporated into the Federal side of a title V permit [see CAA § 504(a); 40 CFR § 70.2)]. Thus, if a State does not want a SIP provision or SIP-approved permit condition to be listed on the Federal side of a title V permit, it must take appropriate steps in accordance with title I substantive and procedural requirements to delete those conditions from its SIP or SIP-approved permit. If there is not such an approved deletion and a SIP provision or condition in a SIP-approved permit is not carried over to the title V permit, then that permit would be subject to an objection by EPA.

[1]The term "SIP-approved permit" is used in this letter to refer to permits issued pursuant to major or minor new source review (NSR) or prevention of significant deterioration (PSD) permit programs approved into SIP's (or promulgated under 40 CFR § 52.21 in States implementing the federal PSD program via delegation from EPA), as well as federally enforceable State operating permits (FESOP's) issued pursuant to SIP-approved operating permit programs. For purposes of this discussion, the term "NSR" includes major nonattainment NSR, minor NSR and PSD.

[2]By the term "federally enforceable," I refer to EPA's and citizens' ability to enforce a provision under sections 113/167 and 304 of the Clean Air Act, respectively. The term " Federally enforceable" has also been used in the past in another context to identify a smaller subset of provisions that may be used to limit a source's "potential to emit." See memorandum from John S. Seitz, Director, Office of Air Quality and Planning Standards, EPA, re Options for Limiting the Potential to Emit (PTE) of a Stationary Source Under Section 112 and Title V of the Clean Air Act (Jan. 25, 1995), at 2 (explaining that for purposes of limiting a source's PTE, " limitations must be enforceable as a practical matter"). This letter does not address this second usage.

NEW SOURCE REVIEW LOOKBACK (INCLUDES BEST AVAILABLE CONTROL TECHNOLOGY/LOWEST ACHIEVABLE EMISSION RATE LOOKBACK)

All sources subject to title V must have a permit to operate that "assures compliance by the source with all applicable requirements." See 40 CFR § 70.1(b); CAA section 504(a). Applicable requirements are defined in section 70.2 to include: "(1) any standard or other requirement provided for in the applicable implementation plan approved or promulgated by EPA through rulemaking under Title I of the [Clean Air] Act. . . ." Such applicable requirements include the requirement to obtain preconstruction permits that comply with applicable preconstruction review requirements under the Act, EPA regulations, and SIP's. See generally CAA sections 110(a)(2)(C), 160-69, & 173; 40 CFR §§ 51.160-66 & 52.21.

For the PSD and major nonattainment NSR permit programs, as you know, preconstruction review requirements include use of best available control technology (BACT) or lowest achievable emission rates (LAER), respectively, for each regulated pollutant that would be emitted in significant amounts and at each emissions unit at which an emissions increase would occur. In determining BACT and LAER, as in implementing other aspects of the PSD or NSR programs, the State exercises considerable discretion. Thus, EPA lacks authority to take corrective action merely because the Agency disagrees with a State's lawful exercise of discretion in making BACT and LAER or related determinations. State discretion is bounded, however, by the fundamental requirements of administrative law that agency decisions not be arbitrary or capricious, be beyond statutory authority, or fail to comply with applicable procedures. Consequently, State-issued preconstruction permits must conform to the applicable requirements of the Clean Air Act and the SIP, and failure to do so may result in corrective action by EPA.

In addition to Clean Air Act enforcement authorities, another form of corrective action available to EPA is the title V objection authority under CAA section 505(b). The Agency may object to issuance of any permit that EPA determines is "not in compliance with the applicable requirements of the Act, including the requirements of an applicable implementation plan." See CAA section 505(b)(1); see also CAA section 113(b)(1) (enforcement authority available for violations of "any requirement or prohibition of an applicable implementation plan or permit.")

Pursuant to EPA policy, the Agency generally will not object to the issuance of a title V permit due to concerns over BACT, LAER, or related determinations made long ago during a prior preconstruction permitting process. However, regarding recently issued NSR/PSD permits, note that EPA policy is to provide adverse comments concerning the substantive or procedural deficiencies of a preconstruction permit during the NSR/PSD permitting process. EPA may thereafter take corrective action, including objecting to the title V permit if its comments were not resolved by the State. Similarly, where the BACT/LAER determination is made during a concurrent or "merged" preconstruction permit and title V permit process, EPA may object to the title V permit due to an improper determination. Finally, the Agency may object to or reopen a

title V permit in response to a public petition showing that title I preconstruction permitting requirements have not been met.

Moreover, where EPA believes that an emission unit has not gone through the proper preconstruction permitting process (and therefore one or more applicable requirements are not incorporated in the draft or proposed title V permit), EPA may object to the title V permit. The permitting authority may then resolve the issue either by demonstrating to EPA's satisfaction that preconstruction permitting requirements were not applicable or by incorporating a schedule requiring the source to obtain a preconstruction permit.

Where an EPA Region is unable to obtain adequate information during its review period to support an objection, the permit may be issued with "placeholder" language stating that the permit shield does not attach to the emission units at issue. In such instances, the permitting office should also consider a referral to the enforcement office for further investigation. The placeholder language would say that while EPA is evaluating the applicability of the PSD/NSR program, a permit shield is not available with respect to applicability of PSD/NSR and that additional applicable requirements may apply should EPA's evaluation show that PSD/NSR applies. If EPA determines that the source is not subject to any additional requirements, the permit can be reopened to provide a permit shield with respect to these requirements.

As a final point, EPA believes that confusion over the "lookback" issue may have arisen from a misunderstanding of language in White Paper I. We would like to take this opportunity to clarify the meaning of that language. Specifically, White Paper I states that:

> Companies are not federally required to reconsider previous applicability determinations as part of their inquiry in preparing part 70 permit applications. However, EPA expects companies to rectify past noncompliance as it is discovered. Companies remain subject to enforcement actions for any past noncompliance with requirements to obtain a permit or meet air pollution control obligations. In addition, the part 70 permit shield is not available for noncompliance with applicable requirements that occurred prior to or continues after submission of the application. [White Paper for Streamlined Development of Part 70 Permit Applications, Office of Air Quality Planning and Standards, EPA (July 10, 1995) at 24].

This passage is intended to convey EPA's belief that a company's responsible official does not have a federal obligation to reconsider previous applicability determinations for the purpose of certifying to the truth, accuracy and completeness of the permit application. Noncompliance of which companies are aware must be reported in the title V applications and corrected expeditiously. This passage further states that noncompliance arising from previous applicability determinations is subject to enforcement and is not covered by the part 70 permit shield. This language does not limit EPA's ability or authority to object to proposed title V permits based on such previous determinations or to request information (from States and sources) related to such decisions in order to assure compliance with applicable requirements.

SUPERSESSION

It is the Agency's view that title V permits may not supersede, void, replace, or otherwise eliminate the independent enforceability of terms and conditions in SIP-approved permits. To assure compliance with "applicable requirements" such as SIP-approved permit terms and conditions, title V permits must record those requirements, but may not eliminate their independent existence and enforceability under title I of the Clean Air Act (i.e., may not supersede them). Title V permits may state that they "subsume" or "incorporate" SIP-approved permit terms and conditions as EPA interprets such statements to mean that the title V permit includes all SIP-approved permit terms, but does not supersede, void, replace, or otherwise eliminate their independent legal existence and enforceability. Regardless of terminology, to the extent that title V permits are used to accomplish the legal result of supersession, EPA believes that such use is improper.

As noted in the previous section, title V permits must assure compliance with terms and conditions in SIP-approved permits. In enacting title V, Congress did not amend title I of the Act and did not intend the title V permitting program to replace the title I permitting programs. SIP-approved permits must remain in effect because they are the legal mechanism through which underlying NSR requirements (from the Act, federal regulations and federally-approved SIP regulations) become applicable, and remain applicable, to individual sources. NSR programs provide the relevant permitting entity with the authority to impose source-specific NSR terms and conditions in legally enforceable permits, and provide States, EPA and citizens with the authority to enforce these permits. Because State title V programs do not provide the authority for the establishment and maintenance of SIP-approved permit requirements, the title V permit cannot "assure compliance" with those requirements unless the underlying implementation and enforcement mechanism for the NSR requirements--the SIP-approved permit--remains valid.

The supersession of SIP-approved permits poses additional problems that EPA believes are inconsistent with the structure and purposes of title V and title I of the Act. First, while SIP-approved permits impose continual operational requirements and restrictions upon a source's air pollution activities and, accordingly, may not expire so long as the source operates, title V permits could expire or become unnecessary.[3] If the title V permit supersedes the source's SIP-approved permit and then subsequently expires, neither the superseded SIP-approved permit nor the expired title V permit would provide the legal authority to enforce the site-specific operational requirements and restrictions imposed upon the source pursuant to preconstruction

[3]Title V permits could expire if a source fails to submit a timely and complete title V permit renewal application. See 40 CFR §§ 70.5(a)(1)(iii), 71.5(a)(1)(iii), 70.7(c) & 71.7(c). In addition, a title V permit could become unnecessary if a source limits its actual and potential emissions below major source thresholds, and the source is not otherwise required to maintain its title V permit.

review. Even if title V permits expire, of course, sources are still required to comply with applicable requirements that remain independently enforceable outside of title V permits, as all applicable requirements must.

Moreover, the continuing existence of SIP-approved permits independent of title V preserves the ability of permitting authorities and EPA to reopen title V permits that failed to include all SIP-approved permit terms, or to make such corrections upon permit renewal. Finally, title V regulations allow a permitting authority to include in the title V permit a "permit shield" stating that "compliance with the conditions of the [title V] permit shall be deemed compliance with any applicable requirements as of the date of permit issuance" [40 CFR §§ 70.6(f) & 71.6(f)]. The fact that compliance with the title V permit may be "deemed compliance" with underlying applicable requirements, including applicable requirements contained in SIP-approved permits, indicates that those underlying requirements must remain in force and may not be superseded. If those requirements could be superseded by the title V permit, there would be no need for a mechanism in the title V permit clarifying the source's obligations and compliance status.

ENCLOSURE B

Response to STAPPA/ALAPCO Recommendations On MACT/Title V Interface Issues (from December 11, 1998 Letter to John Seitz)

[General note: Any responses referring to part 70, or permit revision processes, are based on the present part 70 rule promulgated in 1992.]

A. MANAGEMENT OF CHANGE

A-1. Retrospective application of 112(g)

STAPPA/ALAPCO Recommendation: In cases where NSR violations are addressed for historical construction projects that pre-date the effective date of the Section 112(g) rule, 61 Fed. Reg. 68,384 (December 27, 1996), STAPPA and ALAPCO recommend that Section 112(g) MACT controls not be mandated by EPA.

EPA Response: The EPA agrees that, for historical construction projects which pre-date the effective date of the section 112(g) rule, where a source has violations for operating without valid NSR permits, the EPA will not mandate section 112(g) MACT controls on those historical construction projects.

A-2. Issuance of the permit before MACT compliance details are available

STAPPA/ALAPCO Recommendation: When the title V permit is issued prior to the compliance date of the MACT standard or prior to specific compliance details being available, STAPPA and ALAPCO suggest that the permit initially may include an identification of applicable requirements for the facility at the Subpart level, and that additional details may be added through minor permit modification procedures with public and EPA review occurring at permit renewal.

EPA Response: The EPA agrees that when a permit is issued prior to the MACT compliance date, one option is for the initial permit to describe MACT applicability at the Subpart level, and for all other compliance requirements (including compliance options and parameter ranges) of the MACT that apply below the Subpart level to be added at a later time. Because this more detailed information describes for the first time in the permit specifically how the source will comply with the standard, it is important to have EPA and public review and thus, it must be added as a significant permit modification.

Another option is for the initial permit to identify the MACT standards or requirements that apply at the section or subsection level, including anticipated compliance options, along with the information identified in the Initial Notification required by the General Provisions, see 40 CFR Part 63, Subpart A, or by the applicable Subpart. For example, a permit for a source subject to 40 CFR Part 63, Subpart T would identify, in part, each solvent cleaning machine and the anticipated compliance option. [See 40 CFR § 63.468(a) and (b)]. Additional compliance information required in the Notice of Compliance Status (e.g., parameter values) would be added as a minor permit modification when the NCS is submitted. As clarified at the Dallas workshop, the current Part 70 regulations require that minor permit modifications have an EPA review (but no public review) at the time of the permit modification.

A-3. Changes in the selected compliance option

STAPPA/ALAPCO Recommendation: Where the permit does not initially contain a compliance option that the source wishes to use, STAPPA and ALAPCO recommend that EPA permit additional compliance options already allowed under the MACT standard to be added to the permit as a minor modification with public and EPA review occurring at renewal.

EPA Response: We agree that if a source wishes to add compliance options that are a part of the MACT standard, the compliance options usually can be added to the permit through the minor permit modification process. However, some compliance options, such as those with emissions averaging, would require a significant permit modification due to the amount of judgment involved. Again, the current Part 70 regulations require that minor permit modifications have an EPA review at the time of the permit modification.. As you know, a permit modification may be avoided if the initial permit includes compliance options as alternative operating scenarios under § 70.6(a)(9).

A-4. "Once-In-Always-In" and pollution prevention

STAPPA/ALAPCO Recommendation: STAPPA and ALAPCO recommend that EPA revise its current guidance to recognize that, where greater reductions are achieved through pollution prevention and those emission reductions are practically enforceable, the MACT-specific requirements should no longer apply.

EPA Response: A workgroup consisting of representatives from STAPPA/ALAPCO, OECA, OPPT, and OAQPS has been established to address this issue. Our staff continues to work on this issue with the workgroup. Once the workgroup has completed its efforts and has made a recommendation, a decision will be made by EPA and sent to STAPPA/ALAPCO.

B. LEVEL OF DETAIL FOR POINT SOURCES

B-1. Use of generic groups that do not identify specific emission units

STAPPA/ALAPCO Recommendation: STAPPA and ALAPCO recommend that EPA allow the identification of emission units by generic groups in permits for smaller MACT-affected emission units that are frequently added, removed or changed and for similar multiple control devices subject to the same monitoring, recordkeeping, reporting and testing requirements. This approach would allow emissions units subject to specific applicable requirements not to be specifically identified or listed in the permit. A contemporaneous on-site log could be used to identify specific units and to document changes to and from generic groups.

EPA Response: We interpret your suggestion to recommend that small units subject to MACT standards which are frequently added, removed or changed could be identified in an on-site log, rather than specifically identified in the permit. We further interpret your suggestion as recommending that control devices to which similar MACT requirements apply could be identified in a log, rather than specifically identified in the permit. Finally, we understand your suggestion for a log to be a voluntary mechanism to help the source keep track of units or control devices added to the facility without revising the permit.

As a general rule, the permit must identify not only the applicable requirements, but the specific emissions units to which those requirements apply, to assure compliance by specific units with specific applicable requirements. Linking of applicable requirements to emission units in the permit is important because it retains applicability decisions with the permitting authority instead of transferring these decisions to the source. It also clearly identifies the requirements that apply to each unit and eliminates any disputes as to whether a unit fits a generic group description. Therefore, we believe it is appropriate for the permit to identify specific units. As a practical matter, however, we believe that generic grouping could be appropriate in two situations: 1) where the applicable requirements apply generically; and 2) in certain circumstances where many small units make identification of individual units infeasible. In addition, we are currently involved in several pilot projects that may identify other situations in which generic grouping of emission units may be appropriate.

The first situation where generic grouping may be appropriate is where applicable requirements apply generically to a facility, rather than to an identified class of units. The EPA's White Paper I allowed for the use of generic groups to identify units subject to requirements that apply in the same way to all units at a facility, such as facility-wide opacity limits of the implementation plan (SIP). See White Paper I at 24. An example is a regulation that states "no person shall cause emissions in excess of 20% opacity." Since the requirements do not apply to specific types of units, it is not necessary for the permit to identify specific units subject to the requirement, and hence, generic grouping may be appropriate. [See § II.4 of White Paper I.]

The second situation where generic grouping may be appropriate is where the sheer numbers of units make identification of individual units infeasible, and where the applicable requirement is open to such an approach. Examples where this could be the case include pumps, valves, or flanges covered by leak detection and repair (LDAR) requirements, and manhole

covers or drains covered by wastewater work practice standards. In these situations, instead of identifying specific units, the permit could place affected units into a group in which all units are subject to the same applicable requirement, provided that the permit clearly defines the type of unit in each group and the applicability criteria. If required by the MACT standard, the owner or operator must develop a mechanism to identify which individual units belong to which group, and the permit should reflect this obligation. For example, 40 CFR Part 63, Subpart H requires the source to maintain lists of equipment subject to different requirements of the Subpart, but provides that an on-site recordkeeping system may satisfy this requirement. [See 40 CFR § 63.181(b).]

As to your recommendation of generic grouping for control devices subject to similar requirements, however, we cannot agree. We think it is important for the permit to clearly link emission units to control devices and, in turn, to applicable requirements, so that it is clear which control device is being used to meet which standard for which units. We do not yet understand how this can be done categorically for control devices. We are now working on pilot projects that will allow us to see if certain control devices can be advance-approved and generically grouped. We expect that the size of emission units and the nature of control devices will be considerations.

B-2. Incorporation of multiple compliance options into Title V permits

STAPPA/ALAPCO Recommendation: STAPPA and ALAPCO recommend that EPA recognize that various compliance options authorized by MACT standards can be placed directly in the permit by referencing the MACT provisions, without identifying them as Alternative Operating Scenarios (AOS). The MACT standard provisions (e.g. periodic reports, Notice of Compliance Status) would provide recordkeeping and notification of changes to compliance options. In addition, STAPPA and ALAPCO believe that once the compliance date is past, the source is obligated to maintain continual compliance even if the compliance option changes.

EPA Response: We read your suggestion to recommend that different compliance options of a MACT standard may be referenced in the permit, but not identified as an AOS.

As to your suggestion not to identify compliance options as an AOS, EPA believes that the appropriate way to define different compliance options is as one or more AOS. This is important because to assure compliance with a MACT standard by specific emissions units, the permit must clearly specify which compliance options a source may utilize, using the on-site log required by 40 CFR § 70.6(a)(9) to indicate which compliance option is in effect at a given time. Part 70's AOS provisions supply the appropriate mechanism to ensure that the permit reflects applicability determinations made by the permitting authority for specific emission units, and that inspectors will have historical records and current information on which compliance option the source is following. The EPA is working on ways to streamline the addition of compliance options into the permit.

When the source changes MACT compliance options, part 63 will require a notification (40 CFR § 63.9(j)) in those cases where the newly instituted option was not already incorporated into the permit. That is, § 63.9(j) triggers a notification only in the instance where "information not previously provided" becomes available. A notification would not be necessary if the permit already included all necessary provisions for employing alternate MACT compliance options.

B-3. Level of Detail Needed to Incorporate General Provisions into Permits

STAPPA/ALAPCO Recommendation: With regard to the General Provisions (40 CFR Part 63, Subpart A), STAPPA and ALAPCO recommend that it be sufficient for the permit to specify that the facility is subject to Subpart A as specified in Table 1 of the applicable MACT standard. While state and local agencies may also choose to include summary conditions for key General Provisions requirements, the reference to Subpart A and the MACT-specific Table 1 should be sufficient to meet Part 70 requirements.

EPA Response: Generally, the EPA agrees with this recommendation, including the recommendation that it is sufficient for the permit to reference the appropriate table in the MACT rule (not always Table 1). In cases where the requirements of the General Provisions are not clear enough to cross-reference, however, then the permit may need to contain additional clarification as to how the General Provisions apply to the facility.

B-4. Level of Detail Needed to Incorporate MACT Standards into Permits

STAPPA/ALAPCO Recommendation: STAPPA and ALAPCO recommend that state and local agencies be allowed to specify only that the source is subject to the relevant Subpart, or to include additional detail as circumstances dictate. For example, under STAPPA and ALAPCO's recommended approach, standards such as the MACT standard for Industrial Process Cooling Towers, 40 CFR Part 63, Subpart Q, may be appropriately addressed at the Subpart level. Generally, state and local agencies favor including a summary of conditions of the applicable requirement at the section level or lower, along with a reference statement or, alternatively, including a summary of conditions at the section level, along with specification of the applicable Subpart. However, since there may be times when only specifying the Subpart is sufficient, that should be the minimum requirement.

EPA Response: We interpret your suggestion to recommend that EPA endorse a reference to the Subpart level as generally acceptable except where further specificity is required by the permitting authority. We also interpret your suggestion to apply at any stage of the permit, not just prior to the compliance date of a MACT standard.

The permit needs to cite to whatever level is necessary to identify the applicable requirements that apply to each emissions unit or group of emission units (if generic grouping is used), and to identify how those units will comply with the requirements. As EPA indicated in White Paper II, the permit must at least specify the applicable emission limit or standard, and the

emissions unit to which the limit or standard applies. The White Paper also stated that the permit may use referencing where it is specific enough to define how the applicable requirement applies and where using this approach assures compliance with all applicable requirements. We interpret this to require the permit to identify (or reference) the monitoring, recordkeeping and reporting requirements. Accordingly, we cannot agree with your recommendation that a reference to Subpart level is acceptable at the discretion of the permitting authority.

In the example of the Industrial Process Cooling Towers MACT (Subpart Q), we recommend that the permit identify the standard to be met (i.e., a ban on chromium-based water treatment chemicals), and the unit(s) subject to the standard (i.e., industrial process cooling towers). The permit should also reference the notification requirements of 40 CFR § 63.405, the recordkeeping and reporting requirements of 40 CFR § 63.406, and the applicable General Provisions in Table 1 of Subpart Q.

C. LEVEL OF DETAIL FOR NON-POINT SOURCES

C-1. Identification of wastewater streams subject to MACT in the Title V permit

STAPPA/ALAPCO Recommendation: STAPPA and ALAPCO recommend that each wastewater stream need not be identified individually in the permit. The permit should contain 1) a description of the criteria for determining a wastewater stream's status, or a reference to the relevant MACT provisions that establish those criteria, and 2) the applicable requirements for Group 1 and Group 2 streams. The identification of the wastewater streams affected by MACT (i.e., Group 1 and Group 2 streams) and the applicable group status will be provided in the implementation plan or periodic reports as required by the MACT.

EPA Response: We understand your recommendation to mean that the permit would define wastewater streams as a class (i.e., one class for Group 1, another class Group 2), and would not identify individual wastewater streams within each class. As clarified in Dallas, we interpret your recommendation to apply not only to how the permit identifies wastewater streams existing at the time of permit issuance, but also to how the permit might provide for the addition of new streams without a permit revision.

We do not agree with the idea that individual streams need not be identified. The permit must include a listing of all wastewater streams that designates their status as Group 1 or Group 2, because each Group has different applicable requirements, including monitoring, reporting, recordkeeping and testing requirements. The linkage between individual streams and their Group 1/Group 2 status may be set up as an Alternative Operating Scenario, which would allow individual streams to change status during the permit term, provided that the new status is identified in the on-site log required by part 70. Under this approach, the permit would need to contain or reference the procedures by which the source determines Group 1 or Group 2 status. Also, the permit must be revised in order to identify new wastewater streams. Note that we are experimenting with advance approval of wastewater streams under the MACT standard for

pharmaceutical production, see 63 Fed. Reg. 50, 280 (September 21, 1998) (to be codified at 40 CFR Part 63, Subpart GGG), and may have additional guidance on this topic in the future.

Finally, the permit needs to require the source to provide notification for any change in Group status as required in MACT regulations. For example, Subpart G requires a source to report in the next periodic report any Group 2 emission point that becomes a Group 1 emission point, and include a schedule of compliance as required by § 63.100 of Subpart F. [See 40 CFR § 63.152(c)(4)(iii).]

C-2. Specification of requirements for fugitive and wastewater sources

STAPPA/ALAPCO Recommendation: For fugitive emission requirements, STAPPA and ALAPCO recommend that detail at the Subpart level is generally sufficient (e.g., Subpart H). For wastewater requirements, STAPPA and ALAPCO recommend that the permit contain detail at the section level. If the MACT does not require the source to keep records of the current operating options, the permit could specify such a recordkeeping requirement. Finally, the state and local agencies believe Part 70 does not require the source to notify permitting authorities when they switch compliance options.

EPA Response: We understand your recommendation to apply to equipment leak requirements (" fugitive emission requirements") and wastewater emission points ("wastewater sources.")

As we stated in the response to recommendation B-4, we do not believe that Subpart citation by itself is appropriate. For equipment leak requirements (e.g., Subpart H of part 63, Subpart VV of part 60), different standards, recordkeeping and reporting requirements apply to different types of equipment subject to the rule. For example, one standard applies to pumps in light liquid service, and another standard applies to pumps in heavy liquid service. For this reason, we believe that the applicable requirements of Subpart H (and other similar rules) should be cited at appropriate levels below the Subpart, consistent with the need discussed above to clearly designate the specific applicable requirements for different and specific emission units.

For wastewater streams, citation to the section level (or lower) level of citation is needed to clearly convey the emission limitations of the rules with no ambiguity . We agree that part 70 does not require sources to notify permitting authorities when they switch compliance options that are part of an AOS. However, as noted in the response to recommendation B-2, the MACT general provisions do require reporting and notification when switching to a new compliance option (unless the permit includes the information as an AOS), and these requirements must be met. As we have noted elsewhere, permit revisions can be minimized by including all anticipated options in the permit as AOS's.

C-3. Specification of operating parameters in the permit

STAPPA/ALAPCO Recommendation: STAPPA and ALAPCO recommend that either the actual value for operating parameters or the process to develop those values be considered sufficient to

meet Title V permit requirements. Where operating parameter values are identified in the permit, STAPPA and ALAPCO recommend that the minor permit modification process be used to add or change operating parameter values. Public and EPA review would occur at permit renewal.

EPA Response: We interpret your suggestion as applying to the parameter ranges or maximum/minimum parameter values (from here on we will refer to them as "parameter ranges"). These parameter ranges are required by many MACT standards. However, we interpret your suggestion as not limited solely to MACT standards; for example, it could apply to NSPS standards that require parameter ranges. We further interpret your suggestion as allowing a permit authority to put in the permit either a process for determining the parameter range, or the parameter range itself. We understand the suggestion to put just the process in the permit to mean that the range itself would not be in the initial permit, and also that the permit would not be revised when a new parameter range is set using the process. In addition, you are recommending that if the actual parameter range is identified in the permit, and then a new parameter range is established, the minor permit modification could be used to incorporate the new parameter range.

We believe that the parameter range must be included in the permit. The parameter range is one of the applicable requirements comprising MACT standards, and is often the means for determining compliance with the emission standard. Including the parameter range as a permit term ensures that the source will be required to promptly report deviations from the range [40 CFR § 70.6(a)(3)(iii)(B)], to submit semiannual reports of such deviations and parameter monitoring [40 CFR § 70.6(a)(3)(iii)(A)], and to certify compliance with the range [40 CFR § 70.6(c)(5)].

We agree that for incorporating a new parameter range into a permit, a minor permit modification could be used. We are also investigating whether this could be done as an administrative change to the permit. This is because we believe that most changes to a parameter range will not be a significant change to monitoring, recordkeeping, or reporting [40 CFR §70.7(e)(2)(i)(A)(2)]. Note that in accordance with 40 CFR § 70.7(e)(2)(i)(A), a significant change to monitoring, recordkeeping, or reporting would require the significant modification process. Again, the current Part 70 regulations require that minor permit modifications have an EPA review at the time of the permit modification. [40 CFR § 70.7(e)(iii) & (iv)].

In situations where parameter ranges are expected to change so often that a minor permit modification for each change would be impractical, we suggest that you consider the group processing provisions for minor modifications. See 40 CFR § 70.7(e)(3). These provisions are available for changes that are collectively below the thresholds identified in 40 CFR § 70.7(e)(3)(i)(B). We expect that many changes to parameter ranges would be small enough to fit below these thresholds. If so, group processing allows the permitting authority to group up to a quarter's worth of changes, and then to take up to 180 days to act on the group of permit revisions.

This guidance does not alter the flexibility provided under the "Change Management Strategy" set forth in the preamble to the MACT standard for Pharmaceutical Production, or in future Subparts with similar flexibility. In addition, this guidance does not alter the provisions of the compliance assurance monitoring (CAM) rule, which specifically authorize the permit to include procedures for establishing parameter indicator ranges, designated conditions or excursion triggers, rather the particular ranges, conditions or triggers. See 40 CFR 64.4(a)(2) and (c)(2).

C-4. Incorporation of startup, shutdown, and malfunction plans, operating and maintenance plans, and periodic reports in Title V permits

STAPPA/ALAPCO Recommendation: STAPPA and ALAPCO recommend that EPA use the same approach for operation and maintenance (O&M) plans and periodic reports that is contained in a memorandum from John Seitz dated January 17, 1996 addressing startup, shutdown and malfunction (SSM) plans. The associations further recommend that changes in O&M plans not trigger a permit modification procedure.

EPA Response: We understand your recommendation to be that the approach used in the Seitz memorandum [which applies to startup, shutdown and malfunction (SSM) plans] should also apply to O&M plans and to periodic reports. We further understand your recommendation to be that EPA should not require a permit revision when changes are made to an operation and maintenance plan.

To put your recommendation in context, we need to clarify that the General Provisions of part 63 require any SSM plan to be incorporated by reference into the title V permit [§63.6(e)(3)]. In addition, Subpart N requires an O&M plan to be incorporated by reference into the permit [§63.342(f)(3)(i)]. As far as we are presently aware, Part 63 does not require any periodic reports or any other O&M plans to be incorporated by reference into the permit. Since these periodic reports and O&M plans (except Subpart N) are not required to be incorporated by reference into title V permits, these documents need not be incorporated by reference, nor must their content be included as permit terms, in order to assure compliance with the relevant part 63 applicable requirements. Consequently, we agree that a permit revision would not be required when changes are made to these reports or O&M plans. Of course, permits must still require that sources develop, implement or submit, retain, and revise as necessary these plans or reports, consistent with the applicable MACT standard.

That still leaves the SSM plans required under the General Provisions and the O&M plan required under Subpart N. We recognize that requiring the incorporation of these plans by reference into the permit renders the content of the plans enforceable permit conditions and, accordingly, means that changes to plans could result in permit revisions. We believe that this outcome can be avoided, however, by a general reference in the permit to the SSM plan. The permit would still incorporate the plan by reference, but the reference would not cite the date or specific content of any particular SSM plan. This approach would allow the plan to change

without triggering a permit revision. To implement this approach, the permit would state that the SSM plan required under § 63.6(e)(3), and any revision to that plan, is incorporated by reference and is enforceable as a term and condition of the permit. The permit would further state that revisions to the SSM plan are automatically incorporated by reference and do not require a permit revision.

Although incorporation by reference of a document required by an applicable requirement would normally require reference to the document as it exists on a specific date, we believe the approach outlined here for SSM plans is appropriate because it is more consistent with the intent of the General Provisions, which were promulgated subsequent to part 70 and which contemplate that the source will be able to make changes to the SSM plan without the prior approval of the EPA or the permitting authority. See, e.g., §§ 63.6(e)(3)(v) and (e)(3)(vii). For example, any time the SSM plan fails to address or inadequately addresses an event that meets the characteristics of a malfunction, the source must revise the SSM plan to include procedures for operating and maintaining the source during similar malfunction events, and a program of correction actions for similar malfunctions of process or air pollution control equipment. See § 63.6(e)(3)(viii). In addition, compliance with an SSM plan does not relieve a facility from the responsibility to comply with good air pollution control practices as required by § 63.6(e)(1).

Finally, the permit must contain language that reiterates an enforceable obligation for the source to develop, implement, retain, and revise as necessary the SSM plan. The permit must also contain a reference to the applicable rule requirement that requires the plan. Permit authorities also have the authority to request that the SSM plan be submitted to them. They also can require essential parts of the plan, such as the definition of startup, shutdown and malfunction events, to be included in a permit application, pursuant to § 70.5(c)(5), which states that applications must include all information needed to determine applicability of requirements.

Of course, States retain the authority to incorporate specifically identified SSM plans by reference into title V permits, if a permitting authority believes it is important to review certain changes to particular SSM plans pursuant to its approved part 70 program. Note that the requirement to incorporate the SSM plan by reference is under review by EPA as part of the settlement of the litigation on the Part 63 General Provisions and may be the subject of future rulemaking.

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George V. Voinovich
Governor

Donald R. Schregardus
Director

MEMORANDUM

DATE: December 8, 1992

TO: Distribution

FROM: Robert Hodanbosi, Chief, DAPC

SUBJECT: BAT for fugitive dust sources

In the past couple of months, several PTI recommendations for fugitive dust sources have come through this office with a variety of BAT determinations. This IOC is intended to clarify the current recommended BAT opacity standard for fugitive dust sources (specifically roadways, parking areas, and storage piles).

The reason for the confusion is because OAC 3745-17-08 is less stringent than BAT. Limitations which are more stringent can be found in OAC 3745-17-12.

For unpaved roadways and parking areas PTI recommendations should include a statement which includes the following:

> For the unpaved roadways and parking areas, there shall be no visible particulate emissions except for a period of time not to exceed three minutes during any sixty-minute observation period.

For paved roadways and parking areas PTI recommendations should include a statement which includes the following:

> For the paved roadways and parking areas, there shall be no visible particulate emissions except for a period of time not to exceed one minute during any sixty-minute observation period.

For material storage piles BAT should be as follows:

> For material storage piles, there shall be no visible particulate emissions except for a period of time not to exceed one minute during any sixty-minute observation period.

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These statements for BAT should be included in the special terms and conditions under "BAT Determination" for each fugitive dust source in these categories.

It is also important to remember to carry forward any special terms and conditions from the PTI to the PTO. We need to try to be consistent between the PTI and PTO to eliminate any confusion on the part of the company receiving the permit.

RH/MH/jse

Distribution

Local Air Agency Directors
District Air Unit Supervisors
Jim Braun, DAPC
Misty Parsons, DAPC
Alan Lloyd, DAPC
Jim Orlemann, DAPC

inter-office communication

to: Tim Wilson, RAPCA date: Nov. 19, 1987

from: Kathleen Shannon, DAPC

subject: Sohio Soil Gas Venting System

The following is in response to your October 22, 1987 request for comments:

Item 1: OAC Rule 3745-31-01 does not define best available technology (BAT). Mr. McArdle is correct in assuming BAT is patterned after the Clean Air Act's definition of best available control technology (BACT) (see Engineering Guide No. 42).

The burden of demonstration of BAT lies with the facility. The application that RAPCA has provided to the Ohio EPA does not satisfactorily show that "no control" is BAT. Indeed, the application states, "By virture of this application, Sohio Oil requests that a BAT determination be made for this type of source." The Ohio EPA has, on several occasions, permitted both controlled and uncontrolled air stripping operations. In all cases, the decision is based upon several factors that are unique to the source. Some of the factors that influence the BAT determination are:

1. How long will the unit be in operation? Is the unit a permanent or temporary source?

2. What compounds will be emitted? Are they carcinogenic? Will they cause an odor nuisance? What quantities will be emitted?

3. Does the source comply with the Ohio EPA's air toxic policy? What will be the maximum hourly emission rate? What will be the maximum 1-hour concentration?

4. What air pollution control are viable for this source? Are there any alternatives to air stripping? What are the costs associated with controls or other technologies? What is the cost effectiveness?

The information which you have sent me is somewhat confusing. Sohio's application indicates they already employ a carbon absorption system, yet they do not want to use it because of the expense. The application does not contain any cost data, but RAPCA's letter of September 8, 1987 indicates that cost data was submitted. Whatever the case, the Ohio EPA will need a cost study (completed in accordance with Engineering Guide No. 46) as part of the BAT demonstration.

Using the stack parameters provided in the application and some rough estimates on benzene emissions, this unit is violating the Ohio EPA's air toxic policy. Sohio must show compliance with our policy.

GEN 1001 (3/84)

inter-office communication

to: New Source Review Contacts date: December 31, 1986

from: Bob Hodanbosi, Manager, AQM&P

subject: Air Stripping - Determination of Best Available Technology (BAT)

There has been an increasing number of air permit to install (PTI) applications for air stripping operations. These installations usually involve the clean-up of organic compounds that have contaminated soil or groundwater. Please see attached Pollution Engineering article (note: most installations emit more than 0.5 lb/day). The typical PTI application has not included the consideration of air pollution controls on this clean-up equipment.

In the future, these PTI applications will be scrutinized to ensure compliance with OAC 3745-31-05(A)(3); Best Available Technology. In general, we will require air pollution control equipment and/or water treatment on these operations such that the emissions of organic compounds to the atmosphere are reduced. Each PTI application should be reviewed to ensure that the following measures have been considered:

1. The installation of various air pollution controls to reduce the emissions of organic compounds into the atmosphere; and

2. The use of alternative technology to air stripping. Other methodologies are available to reduce the organic concentrations in the liquid phase in combination or as a substitute to air stripping.

These installations are usually temporary, however, in some cases, air stripping is being proposed as a permanent "solution" to a waste water discharge problem. We will also perform an air toxics review in the Central Office to determine the ambient impact of the resultant emissions from these sources. We will not recommend approval of any installation that exceeds the interim DAPC air toxics policy for new sources.

If you have any questions, please do not hesitate to contact me at (614) 466-6116.

BH/jlc

Attachment

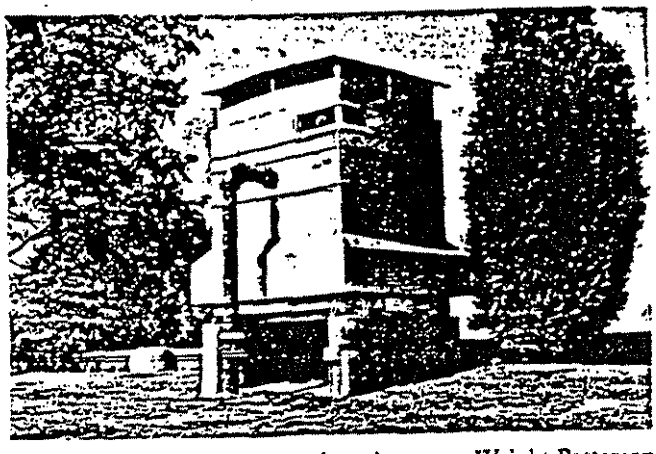
cc: Virginia Aveni, Deputy Director
Gary Martin, Water Quality
Chuck Taylor, Hazardous
Ken Schultz, Emergency Response
Andy Turner, Water Pollution
Russ Stein, Groundwater
Pat Walling, Air Pollution
Kathleen Shannon, Air Pollution

GEN 1001 (3/84)

Casebook

by Marge Boynton

STRIPPING REMOVES LOW-LEVEL VOC'S FOR AIR FORCE



In later 1985 environmental engineers at Wright-Patterson Air Force Base, Dayton, OH discovered that several of their onbase drinking water wells were contaminated with low levels of several volatile organic compounds (VOCs). Two of the wells involved provided 1800 gpm (2.6 mgd) to two underground storage reservoirs for subsequent discharge into the base distribution system. These reservoirs provide demand surge capacity and primary fire protection storage capacity, so there was a desire to bring them back online as expediously as possible. The Air Force decided to install a temporary treatment system for six months to get the wells operational again as soon as possible, and to use this time to explore, design and install a permanent system.

The wells were showing a total VOC contamination level of approximately 30 ppb, with the majority of that coming from trichloroethylene (TCE) and tetrachloroethylene (PCE). Effluent contaminant levels after treatment were to be no more than 5 ppb of any specific VOC. These VOC's are typically used as degreasing solvents and cleaning agents, and several are suspected carcinogens or mutagens. There were no obvious sources of the contamination, and it was felt that it may have resulted from past methods of aircraft cleaning and improper disposal of spent solvents.

DETOX, Inc., Dayton, OH was selected to supply and install this temporary VOC treatment system. The stripper unit has a total cross-sectional area of 120 ft^2, resulting in a unit hydraulic loading rate of 15 gpm/ft^2. A maximum of 72,000 scfm of air is possible with the unit, resulting in a maximum air-to-water ratio of 300:1 on a volume/volume basis. After distribution through a spray nozzle system, the water is trickled over 4 ft of a structured media containing approximately 70 ft^2/ft^3 of surface area. After treatment, the stripped water flows by gravity from the unit into the nearby underground reservoir. Chlorination of the water is performed in the stripper effluent line prior to discharge into the reservoir.

The unit was designed to be fully automatic and self-regulating, requiring no operator attention and very little maintenance attention. A flow sensor switch was installed in the influent line to sense water flow. This switch automatically actuates the fan motor, as well as a solenoid switch controlling chlorinated blend water to be mixed with the effluent.

If all of the influent VOCs were removed by the stripper,

(Continued on page 50)

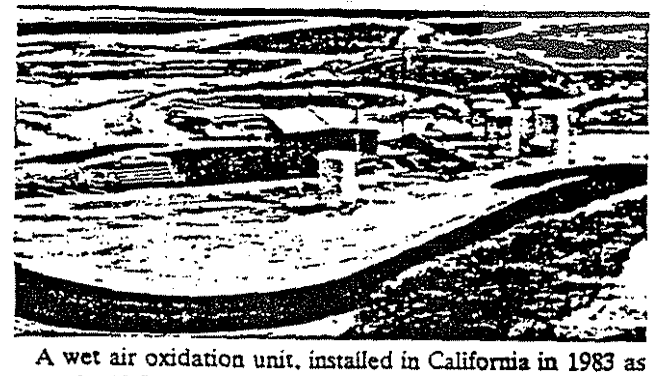
Casebook

(Continued from page 10)

the unit would emit approximately 0.5 lb/day of VOCs into the atmosphere (based on 18 hr/day of operation). Based on the maximum airflow rate of 72,000 scfm, this would result in an air discharge concentration of 80 ppb on a weight/weight basis. These emission rates and concentrations are well below those levels warranting regulation and vapor phase control at the installation.

The unit was designed to remove a minimum of 58 percent of the specified VOCs, and is currently achieving better than 85 percent removal of total VOCs. Total costs of the system including amortized capital costs and daily power costs are approximately $0.02/1000 gal treated, or $39/day. This cost compares favorably with other air stripping total costs of $0.06/1000 gal or greater. Based on cost estimates of both temporary and permanent treatment systems, this one-time installation resulted in a savings of approximately $175,000 to the Air Force. For more information Circle 245.

WET OXIDATION UNIT RUNS ROUND THE CLOCK ON HAZ WASTES



A wet air oxidation unit, installed in California in 1983 as part of a U.S. Environmental Protection Agency demonstration project, is now operating nearly around the clock treating and destroying a variety of hazardous wastes. The unit, built by Zimpro Inc. of Rothschild, WI, is located at a Class I landfill site operated by Casmalia Resources in northern Santa Barbara County. It is designed to process a maximum of 10 gpm of waste and is mounted on transportable skids for rapid field erection.

It was initially installed by Casmalia Resources to commercially test innovative hazardous waste treatment technologies and during 1983–4 was successfully demonstrated on six specific waste streams: cyanides, phenols, organic sulfurs, pesticides, solvent still bottoms, and general organic wastes. Following the demonstration project, the unit has been operated commercially, treating a variety of wastes produced by some 50-75 chemical plants, refineries, metal platers, laboratories utilities, heavy equipment makers, and military installations in the southern California area.

During 1986, the unit has operated essentially 24 hr/day, 6-7 days/wk, processing over 200,000 gal/mo of waste. Liquid wastes are screened for treatability, trucked to the Casmalia Resources site, and then stored in tanks before wet oxidation.

Effluent from the wet air oxidation unit contains water and short-chain, low molecular weight compounds such as acetic acid, and is directed to existing evaporation ponds at the landfill. Process off-gases are passed through a two-stage wet scrubber and carbon bed, as required by local regulatory agencies. For more information Circle 246.

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inter-office communication

to: Dennis Bush, NEDO date: July 9, 1986

from: Bob Hodanbosi, Manager, AQM&P

subject: PTI/BAT Requirements for Water Supply Air Stripping

Question: When is a permit to install (PTI) required for a contaminated water supply air stripping operation?

Answer: The PTI regulations do not cite any exemptions for air stripping operations from the PTI requirements. However, the Division of Air Pollution Control (DAPC) realizes that these operations are usually emergency projects and require a prompt response. Field offices are at liberty to make this judgement. Decisions should take into account the type of air contaminant, the total potential emissions, and the expected duration of the project. Should a field office determine that a PTI is not required, DAPC asks that they notify the Central Office of their decision and the reasoning behind that decision.

Question: What is best available technology (BAT) for such an operation?

Answer: A BAT decision would also take into account the type of air contaminant, the total amount of emissions, and the duration of the project. In the past, some air stripping operations have been required to use a carbon absorption system, but this may not be true for all operations.

f you have any questions, please call me at (614) 466-6116.

KS/BH/jlc

GEN 1001 (3 84)

OHIO EPA POLICY ON
BEST AVAILABLE TECHNOLOGY FOR
SMALL COAL-FIRED BOILERS

September 10, 1984

Particulate Emission Limits

Sources on which construction was begun prior to 1/1/74:

The requirements of OAC 3745-17-10 apply, including the alternative found in paragraph (C)(7) of that rule.

Sources on which construction was begun from 1/1/74 to 7/1/78:

The requirements of OAC 3745-17-10 apply, except that the limits found on curve P-1 of Figure I are used regardless of the location of the source. Also, the alternative found in OAC 3745-17-10 (C)(7) does not apply to these sources.

Sources on which construction was begun from 7/1/78 to 1/1/84:

The limit for boilers with capacities from 1 to 3 million Btu's per hour is 0.40 pounds per million Btu's.

The limit for boilers with capacities between 3 and 10 million Btu's per hour is 0.30 pounds per million Btu's.

The limit for boilers with capacities from 10 to 20 million Btu's per hour is 0.20 pounds per million Btu's.

Sources on which construction was begun after 1/1/84:

Boilers with capacities from 1 to 3 million Btu's per hour must have over-fire air, no flyash reinjection, a dust collector if the boiler has a spreader stoker, and must meet an emission limit of 0.40 pounds per million Btu's.

Boilers with capacities greater than 3 and up to 20 million Btu's per hour must, except as indicated below, have at least a mechanical dust collector. Maximum emission limits are 0.30 pounds per million Btu's for boilers with capacities between 3 and 10 million Btu's per hours, and 0.20 pounds per million Btu's for boilers with capacities from 10 to 20 million Btu's per hour.

Exempted from the mandatory control equipment requirement are the following: 1) anthracite coal-fired boilers with traveling grate stokers and capacities up to 10 million Btu's per hour; 2) boilers on which a stack test, showing that the above emission limit can be met on a continuous basis, has been performed.

Sulfur Dioxide Emission Limits

Sources on which construction was begun prior to 12/28/79:

Boilers with capacities of 10 million Btu's per hour or less are exempt.

For all other boilers, the limits found in OAC 3745-18 are applicable.

Sources on which construction was begun after 12/27/79:

Boilers with capacities from 1 to 10 million Btu's per hour must meet the respective general county emission limit found in OAC 3745-18.

Boilers with capacities from 10 to 20 million Btu's per hour must meet an emission limit based on the use of locally available coal, or 3.0 pounds per million Btu's, whichever is less.

If a boiler (with a capacity of up to 20 million Btu's per hour) which had previously burned coal is converted back to coal, the applicable emission limits are those which were in effect during the last period that the boiler burned coal.

RECEIVED
FEB 19 1999

DIVISION OF AIR POLLUTION CONTROL

INTER-OFFICE COMMUNICATION

TO: Distribution

FROM: The BAT Study Team, a sub-committee of the Permitting & Enforcement Committee through Mike Hopkins, AQM&P, DAPC, OEPA

DATE: February 17, 1999

RE: Proposed "Is a Best Available Technology Study Needed?" guidance document

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The attached proposed guidance document and accompanying flow chart are intended for both the permit applicant and the permit reviewer at the District Office or Local Air Agency. Please take some time to review the guidance document and flow chart.

The guidance document may be employed if no controls or pollution prevention alternatives are proposed. If the proposed pollutant management methods are less stringent than the state's BAT requirements for similar sources, one could use the guidance as well. This guidance document is meant to supplement available resources that applicant and reviewer already have.

Our team had hoped to determine a minimum VOC ton per year level which was most likely to be economically feasible to control or employ pollution prevention measures. We considered cost factors from 12 BAT studies (11 to control VOC emissions and 1 to control NO_x emissions) as received from our survey results of November 1998. However, a clear relationship among various cost factor comparisons is not apparent with our current, limited database. In the mean time we suggest that an allowable rate of 75 tons/year or more of VOC emissions be considered for a BAT cost effectiveness study.

Any additional BAT study data would help us develop a more realistic VOC trigger level. You may send the attached "Cost Effective Information" table to Bradley Miller of the Hamilton County Environmental Services. You may contact Mr. Miller at (513) 946-7731 or via fax at (513) 946-7778.

A second guide, "BAT Study checklist", will be proposed and distributed for comments in a few months. It will offer a format for a state BAT study.

Please send written comments via e-mail to christine.mcphee@epa.state.oh.us by **March 19, 1999.**

CM/eaf

Attachments

DISTRIBUTION:

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Is a Best Available Technology Study Needed?

I. INTRODUCTION

A. Purpose of the flow chart

The purpose of the flowchart is to provide a consistent decision making process for Best Available Technology (BAT) studies throughout the state of Ohio. Permit applicants and permit application reviewers can use the flowchart to determine the need for a BAT study.

Pollution prevention (P2) alternatives should be evaluated as a BAT strategy. For BAT pollution prevention could be evaluated prior to assessing control equipment needs. This method is known as a "top down" analysis where source reduction options are considered before capture, control, and treatment options. The benefits of using P2 can include: a potential decrease in emissions that could exempt the emissions unit from permitting requirements; P2 may be less expensive to implement than add-on controls; lower permit and emissions inventory fees; and applicants may avoid triggering federal permit requirements (e.g., Title V, BACT, LAER or PSD permitting).

For more information on pollution prevention, visit the Ohio EPA's Office of Pollution Prevention web site at www.epa.state.oh.us/opp or call them at (614) 644-3469.

B. Definitions

1. BAT: Best Available Technology (BAT), as defined in Ohio Administrative Code (OAC) Rule 3745-31-01 (N), may be any combination of work practices, raw material specifications, throughput limitations, emission limitations, source design characteristics, an evaluation of the annualized cost per ton of air pollutant removed, or air pollution control devices that have been previously demonstrated to operate satisfactorily in Ohio or other states with similar air quality on substantially similar air contaminant sources. The use of BAT to control air contaminant emissions is an Ohio requirement for any air contaminant source, installed after January 1, 1974, that requires a Permit to Install (PTI).

2. BACT: Best Available Control Technology (BACT) is a more stringent standard for major stationary sources or major modifications, as defined in OAC Rule 3745-31-01(SS) and in OAC Rule 3745-31-01(RR), respectively, subject to federal New Source Review permitting under the Prevention of Significant Deterioration (PSD) permitting program. BACT is defined in OAC Rule 3745-31-01(M) as an emissions limitation (including a visible emissions standard) based upon the maximum degree of reduction for each air pollutant subject to regulation under the Clean Air Act that would be emitted from any proposed major stationary source or major modification that the director, on a case-by-case basis, taking into account energy, environmental and economic impacts and other costs, determines is achievable for such major stationary source or major modification through application of production processes or available methods, systems and techniques, including fuel combustion techniques for control of such air pollutant.

3. PSD: Prevention of Significant Deterioration, is a permitting process that prevents deterioration of the air quality in areas that are in attainment of the National Ambient Air Quality Standards. The PSD requirements are specified in 40 CFR Part 52.21.

4. LAER: Lowest achievable emission rate, for any stationary source, means the more

stringent rate of emissions based on the following, as specified in OAC Rule 3745-31-01(OO):

a. The most stringent emissions limitation that is contained in the implementation plan of any state for such class or category of stationary source, unless the owner or operator of the proposed stationary source demonstrates that such limitations are not achievable; or

b. The most stringent emissions limitation that is achieved in practice by such class or category of stationary source. This limitation, when applied to a modification, means the lowest achievable emissions rate for the new or modified emissions units within the stationary source. In no event, shall the application of this term permit a proposed new or modified stationary source to emit any air pollutant in excess of the amount allowable under applicable new source standards of performance.

See OAC Rule 3745-31-01(RRR) for the definition of a stationary source.

5. **Major MACT (Maximum Achievable Control Technology) source**: as defined in OAC Rule 3745-31-01(QQ), means any process or production unit that in and of itself has the potential to emit ten tons per year or more of any single hazardous air pollutant or twenty-five tons per year or more of any combination of hazardous air pollutants (as listed in section 112(b) of the federal Clean Air Act).

A "MACT Determination" must be developed and approved of by U.S. EPA for Major MACT sources, constructed on or after June 29, 1998 and which do not have an applicable MACT category stardard. Major MACT sources which are exempt from obtaining a "MACT determination" include:

a. a source which is regulated or exempted by an industry specific MACT standard as found in 40 CFR Part 63 (For a list of MACT categories see www.epa.state.oh.us/dapc/mact/mactmain.html);

b. an electric utility steam generating unit(s); and

c. research and development activities.

See OAC Rule 3745-31-28 for further information.

6. **MACT Determination:** as defined in OAC Rule 3745-31-01(PP), means any combination of emission limitations, work practices, raw material specifications, throughput limitations, source design characteristics, and air pollution control devices that achieve the level of hazardous air pollutant control required by Rule 3745-31-28(E) of the Administrative Code.

7. **NESHAP**: National Emissions Standards for Hazardous Air Pollutants, these are emissions standards for asbestos, benzene, radio nuclides, beryllium, mercury, vinyl

chloride, arsenic and coke ovens emissions. A list of the NESHAP categories can be found in 40 CFR Part 61. You may wish to download a copy of Part 61 from the website, http://www.access.gpo.gov/nara/cfr/index.html. Click on the "Browse" feature to search for Title 40, then search for "40CFR61 Part 61".

8. **NSPS**: New Source Performance Standards, are emissions or performance standards for new or older emissions units. A list of NSPS categories can be found in 40 CFR Part 60. You may wish to download a copy of the Table of Contents for Part 60 from the website, http://www.access.gpo.gov/nara/cfr/index.html. Click on the "Browse" feature to search for Title 40, then search for "40CFR60 Part 60".

9. **BAT Study**: A BAT study documents the results/findings of the permit applicant's evaluation of the technical and economic feasibility of various control methods to minimize and control air contaminant emissions from emissions units in a construction or modification project, as proposed in a PTI application. A BAT study may be required for an individual emissions unit or for a combination of emissions units. A BAT study must be submitted with a PTI application in order for the application to be deemed complete by the permit reviewing agency.

10. **Modification**: Defined in OAC Rule 3745-31-01(VV), means any physical change in, or change in the method of operation of any air contaminant source that:

    a. results in an increase in the allowable emissions;

    b. results in an increase in emissions of greater than the de minimis levels in OAC rule 3745-15-05 of any type of air contaminant not previously emitted;

    c. results in the relocation of the air contaminant source to a new facility, including, but not limited to, the movement of any existing air contaminant source from another state, county, or other geographic location;

    d. is otherwise defined as a major modification, or is defined as a modification under applicable regulations promulgated by the Administrator of the USEPA regarding New Source Performance Standards (NSPS) or National Emissions Standards for Hazardous Air Pollutants (NESHAPS) or Section 112 of the Clean Air Act.

11. **Pollution Prevention**: For the State of Ohio, pollution prevention (P2) is the use of source pollution reduction techniques in order to reduce risk to public health, safety, welfare, and the environment and, as a second preference, the use of environmentally sound recycling to achieve these same goals. Source reduction is the reduction or elimination of waste and emissions at the point of generation. Source reduction measures may include process modification, good operating and management practices, increasing the efficiency of machinery, and recycling within a waste generating or other production process. For example, in a coatings operation, P2 options might include the use of low volatile organic compound (VOC) paints and solvents, or switching to powder coating.

C. Using Discretion with this Flow Chart

This flow chart involves decision making and requires discretion when determining if a BAT study is required. Usually the entire combination of new emission units, or the entire project must first be considered for the BAT study. If none of the proposed technologies are cost effective, then a BAT study should be performed for the larger emission unit(s) to see if it is cost effective for that unit(s). For modifications, the BAT study should be considered for the amount of the emissions increase occurring due to the modification. The requirement of a BAT study must always be determined on a case-by-case basis. It is advisable to consult the appropriate permit review agency prior to submittal of the permit application and any BAT study.

II. FLOWCHART

A. Is the project a modification as defined in OAC Rule 3745-31-01(VV) and/or does the project involve the installation of new emissions unit(s)? Permit applicants should discuss their facility's plans with their district or local air agency contact person to confirm this decision.

- Yes - Move to the next question.
- No - BAT study is not required, no permits required.

B. Does the emissions unit and/or project comply with the Air Toxic Policy, see Engineering Guideline #69 available on www.epa.state.oh.us/dapc/engineer/eguides.html., if applicable.

- Yes - Move to the "Attainment for pollutant" box.
- No - Methods to ensure compliance with the air toxic policy shall be included in the BAT determination. The emissions unit and/or project have to comply with the air toxic policy before moving to the next question.

Note: Emissions unit(s) that are subject to a MACT category standard, an NSPS standard or a NESHAP standard, that was finalized within five years, and will have operational restrictions to limit the potential to emit may be subject to the federal emission limit noted in the rule. The allowable hazardous air pollutant emissions from these types of "area (MACT)" emissions units may be exempt from the dispersion modeling requirements of the Air Toxic Policy. However, the allowable criteria pollutants (i. e. particulate matter, carbon monoxide, nitrogen oxides or sulfur dioxide) would still need to be modeled.

C. Is the county attainment for criteria pollutants (i. e. particulate matter, volatile organic compounds, carbon monoxide, nitrogen oxides or sulfur dioxide) to be emitted? Note: this question should be analyzed for <u>each pollutant</u> separately. Contact the appropriate permitting agency for information. A list of Ohio EPA District and Local Air Pollution Agencies is included with the Permit to Install Application.

- Yes - Move to major project in attainment area box.
- No - Move to major project in non-attainment area box.

D. Is this a major stationary source or major modification, as defined in OAC rule 3745-31-01(SS) and in OAC Rule 3745-31-01(RR), respectively?

- Yes - A state BAT study is not required. If a facility is in a non-attainment area, the lowest achievable emissions rate (LAER) is applicable to that project. If a facility is in an attainment area, the Prevention of Significant Deterioration (PSD) rules are applicable and a Best Available Control Technology (BACT) review is required. In either case, LAER or BACT will meet state BAT requirements.

- No - Move to MACT, NSPS, NESHAP box.

E. Are the requirements of Maximum Available Control Technology (MACT) category standards, New Source Performance Standard or NESHAP applicable?

- Yes - Move to five (5) years question box.

- No - Move to 112(g) box.

1. Is the applicable MACT standard, NSPS regulation and/or NESHAP older than five (5) years old?

- Yes - Move to "check previous BAT for similar emissions unit(s)" box.

- No - No BAT study required. According to Ohio Revised Code (ORC) 3704.03(T), BAT is determined to be the NSPS requirements for that emissions unit(s) if the standards have been finalized within the past five years. Likewise, compliance with a MACT category standard or NESHAP standard, which were finalized within the past five years should meet state BAT requirements.

F. Do the 112(g) regulations apply?

- Yes - Conduct a 112(g) control technology study and obtain a "MACT determination".

- No - Move to "check previous BAT for similar emissions units" box.

G. Check previous BAT determinations for similar emissions units. The determination of similar sources is a judgement, which takes into account the following factors:

1. Do the processes have the same design and operation?

2. Do the processes have approximately the same capacity?

3. Do the processes emit the same or similar air pollutants?

4. Can the processes be controlled by the same type of control technology?

5. Is the volume or concentration of the pollutants approximately the same?

Check the BAT database, previously issued PTIs, and BACT databases. The state BAT database can be found on the Ohio EPA's web page,www.epa.state.oh.us/dapc/files/files.html. The allowable limits may be based on restrictive limits that were accepted to avoid federal requirements and these restrictive limits may not consititute state BAT. You may contact the appropriate permitting agency for further assistance.

Another source of information is the national BACT/LAER clearinghouse available at http://www.epa.gov/ttn/, then select the RBLC option.

Is the proposed BAT for the new or modified emissions unit(s) similar to previous BAT determination(s)?

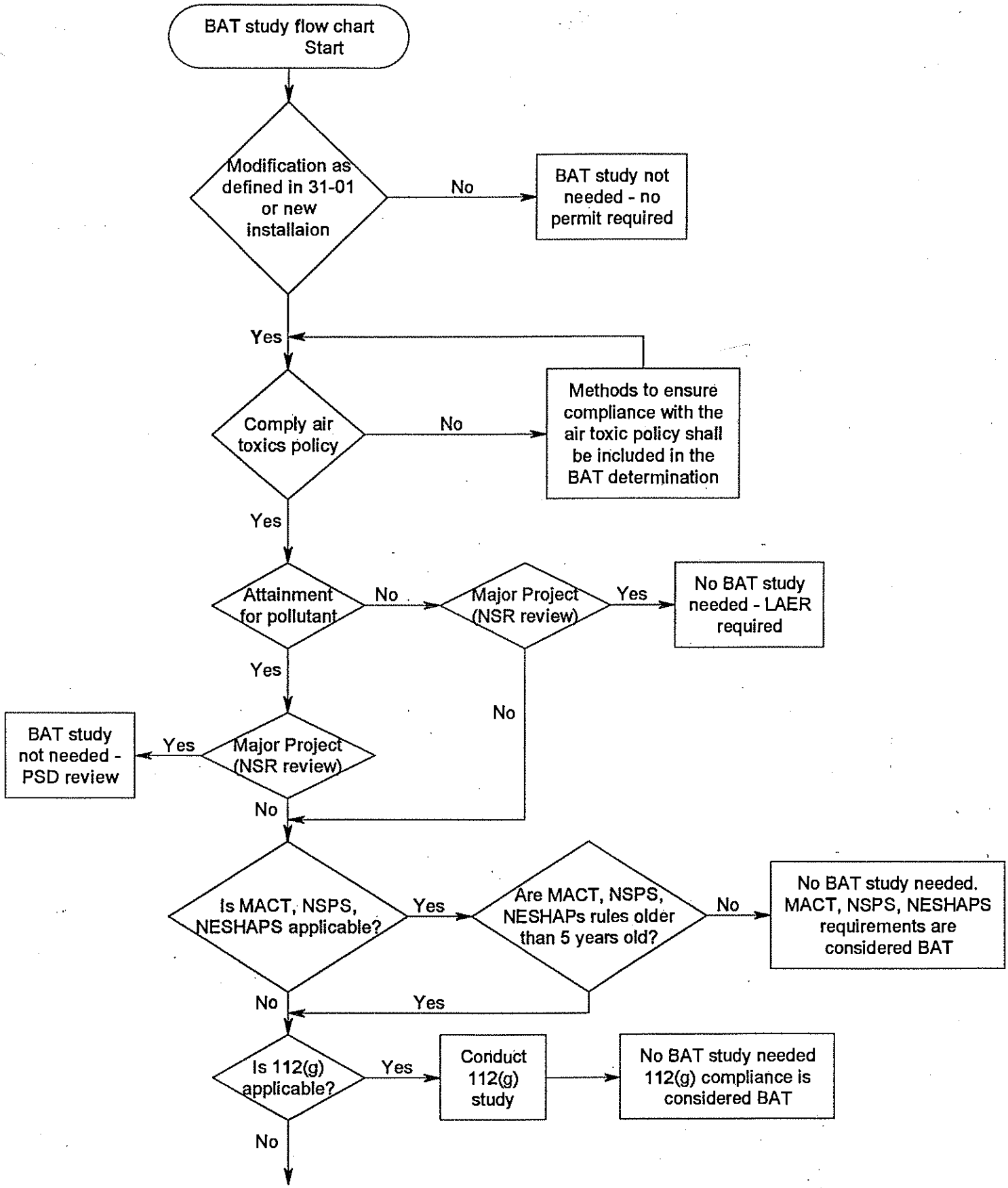
- Yes - No BAT study is needed. Supply BAT survey for similar emissions unit(s) with permit application.
- No - Move to "trigger levels exceeded" box.

H. Do the potential emissions (prior to controls or pollution prevention alternatives) or the requested permitted limits from the emissions unit or project exceed the trigger levels: 75 TPY OC? There are no established trigger levels for other pollutants.

- Yes - Move to "BAT study required" box.
- No - No BAT study is required.

I. BAT study required. Please refer to the BAT study checklist for more information about how to conduct and submit a BAT study. The "Guidance for Estimating Capitol and Annual Costs of Air Pollution Control Systems" study can be found in Engineering Guide #46 on the Ohio EPA web page, www.epa.state.oh.us/dapc/engineer/eguides.html.

BAT STUDY NEEDED?
Evaluate for each pollutant separately



BAT Study Checklist

I. INTRODUCTION

A. **Purpose:** The purpose of this document is to provide a convenient checklist for preparers and reviewers of BAT studies conducted in conjunction with an Ohio EPA Permit to Install (PTI) application. This document gives clarification as to the format and content required of the BAT Cost Effectiveness study, but does not discuss how to do the study. For detailed reference on how to complete a BAT Cost Effectiveness study, use an Engineering Economics text or refer to Engineering Guide No. 46.

B. This document covers the basics in a general manner, however, before starting a specific study, confirm with the reviewing engineer at your local Ohio EPA field office to ensure the proper scenarios are covered. If you are not familiar with BAT studies or engineering economics, you may find a consultant helpful.

II. PROCESS INFORMATION:

A. **Process Description**: A step by step description of the process. Materials used in each step of the process. List of the material information shall include the material's state of matter (solid, liquid, gas), as well as the purpose of the material (catalyst, part of product, etc.). Usage shall be given in a rate form (lb/hr, lb/batch etc.). The description will also include an operational flow diagram.

B. **Steady State Vs. Batch:** Does the emissions unit operate continuously or is it a batch process?

1. For continuous processes, what are the maximum hourly and average input rates (in pounds per hour)?

2. For batch processes, what are the batch times and the down time between batches? What are the maximum and average batch process weights (in pounds per batch)?

III. EMISSIONS INFORMATION

A. **Pollutants Emitted:** A list of any regulated pollutant that could be emitted from the source (Criteria and HAP).

B. **Concentrations:** At what concentration are the pollutants found in the air stream to be controlled (mass/volume)?

C. **PTE - Uncontrolled Potential to Emit (PTE):** Based upon a 24 hr. per day, 365 days per year at a maximum operational rate, ~~A~~ as defined in OAC Rule 3745-31. Include both the short term PTE in lbs./hr., or lbs./batch, and the long term PTE in tons/yr.

D. **Allowable Limits (Rule Basis):** Limits set forward in a specific rule. If applicable, please list all limits set forth in an applicable rule.

E. **Assumptions:** Explain in detail any assumptions used, such as control efficiency, inherent physical limitations, emission factors, etc. Include the source of the emission factors used.

IV. EXHAUST DATA

A. **Ventilation System:** Describe or diagram the ventilation system.

B. **Egress Point Data:** Stack or Fugitive

C. **Airflow:** The amount of air generated by the emissions units air handling systems such as fans, hoods and ducts, the characteristics (velocity, moisture content and temperature) of the air flow should also be known and considered.

D. **Make Up Air For Ventilation:** Is air added for ventilation for worker safety or cooling?

E. **Capture:** What percentage of the pollutants emitted from the emissions unit is captured by the air handling systems, as a percentage? How was this percentage determined?

F. **Exhaust System:** Describe or diagram the exhaust system.

V. CONTROL TECHNOLOGY OPTIONS/PROCESS MODIFICATIONS (POLLUTION PREVENTION)

A. **Technical Feasibility:** What control technologies are technically feasible to control the pollutants from the emissions unit given the parameters listed above? Explain feasibility of all options.

B. **Design Efficiency:** What are the design capture and control efficiencies for the technologies considered?

C. **Pollution Prevention (PP):** Can any pollution prevention initiatives be considered to reduce, reuse or recycle emissions from the emissions unit? If so, explain what was considered and indicate whether or not it was implemented.

VI. ANALYSIS (COST)

For each feasible control technology, complete the cost analysis section. At least two vender quotes should be included for each feasible control technology. ~~Include~~ **Explain** what is included with the quotes, i.e., does the system come turn key, or are some components or accessories required but not ~~included~~ **noted** in the quote? To properly perform a cost analysis, please refer to Ohio EPA Engineering Guide No. 46.

For your convenience, ~~the following~~ excerpts from Engineering Guide No. 46 are ~~included below~~ **on the following pages**, you may find them helpful in preparing the cost analysis portion of the BAT study. If you would like to view the Engineering Guide in its entirety, go to: http://www.epa.ohio.gov/dapc/engineer/eguides.html.

TABLE C-1. EXAMPLE FORMAT FOR COMPUTING AND PRESENTING CAPITAL COSTS

Cost Item	Computation Method			Cost, dollars	
Direct costs					
Purchased equipment:					
Basic equipment (A)	Purchased cost of control device			_____	
Auxiliary equipment (B)	Purchased cost of auxiliaries			_____	
Total equipment costs (A+B)	Total of above (A+B)			_____	
	Average cost factor x	Adjustment factor x	(A+B)		
Instruments/controls	(0.10)	( )	( )	_____	
Taxes (unless exempt)	(0.05)		( )	_____	
Freight	(0.05)	( )	( )	_____	
Base price ©	Subtotal of above plus (A+B)				_____ ©
Installation costs, direct:	Average cost factor x	Adjustment factor x	©		
Foundations/supports	( )		( )	_____	
Erection/handling	( )	( )	( )	_____	
Electrical	( )		( )	_____	
Piping	( )		( )	_____	
Insulation	( )		( )	_____	
Painting	( )		( )	_____	
Site preparation[b]	Estimate ( ) x adjustment ( )				
Facilities/buildings[b]	Estimate ( ) x adjustment ( )				
Total installation costs (D)	Subtotal of above				_____ (D)
TOTAL DIRECT COSTS (E)	Base price © + installation cost (D)				_____ (E)
Installation costs, indirect:	Average cost factor x	Adjustment factor x	©		
Engineering/supervision	( )	( )	( )	_____	
Construction/field expenses	( )	( )	( )	_____	
Construction fee	(0.10)	( )	( )	_____	
Start-up	( )		( )	_____	
Performance test	(0.01)		( )	_____	
Model study	( )	( )	( )	_____	
Contingencies	(0.03)	( )			
TOTAL INDIRECT COSTS (F)	Total of above indirect costs				_____ (F)
TOTAL CAPITAL COSTS (G)	Direct costs (E) + indirect costs (F)				_____ (G)

[a] Absence of parenthesis in the adjustment factor column means no such factor is available.

[b] Costs for these are unrelated to equipment costs © and are developed independently on an individual item sis. General estimates for these items can be modified with cost adjustment factors. Case specific estimates entered directly in the cost column.

TABLE C-2. EXAMPLE FORMAT FOR COMPUTING AND PRESENTING ANNUALIZED COSTS

Cost Item	Computation method	Cost, dollars	
Direct operating costs			
Operating labor			
Operator	____, $/h x ____ h/Yr	____ (a)	
Supervision	15% of operator labor cost	____	
Operating materials	As required		
Maintenance (general)			
Labor	____, $/h x ____ h/Yr	____ (b)	
Materials	100% of maintenance labor	____	
Replacement parts	As required	____	
Labor	100% of replacement parts cost	____	
Utilities		____	
Electricity	____, $/kWh x ____ kWh/Yr	____	
Fuel oil	____, $/gal x ____ gal/Yr	____	
Gas	____, $/10^{3}ft^3 x ____ 10^{3}ft$^{3/Yr}$	____	
Water	____, $/10^3 gal x ____ 10^{3}gal/Yr	____	
Steam	____, $10^3 lb x ____ 10^3 lb/Yr	____	
Other (specify)	As required	____	
Waste disposal	____, $/ton x ____ ton/Yr	____	
Wastewater treatment	____, $/10^3 gal x ____ 10^{3}gal/Yr	____	
TOTAL DIRECT OPERATING COSTS (A)	Subtotal of above		____ (A)
Indirect operating (fixed) costs			
Overhead	80% of O/M labor costs (a+b)	____	
Property tax	1% of capital costs ($ ____)*	____	
Insurance	1% of capital costs*	____	
Administration	2% of capital costs*	____	
Capital recovery	CRF ___ (at ___%, ___yrs) x capital costs*	____	
TOTAL FIXED COSTS (B)	Subtotal of above		____ (B)
Credits			
Product recovery	____, $/ton x ____ ton/Yr	(____)	
Heat recovery	____, $/10^6 Btu x ____ 10^6 Btu/Yr	(____)	
TOTAL CREDITS (minus C)	Subtotal of above		(___) ©
TOTAL ANNUALIZED COSTS (D)	(A+B) minus ©		(___) (D)

* Total capital costs (G) from Table C-1.

VII. CALCULATIONS:

Include a copy of the calculations used to determine emissions, control efficiency, cost of control and cost per ton of reduction. Explain any assumptions used, present any data and/or background information (pertaining to the calculations) considered while making the calculations.

VIII. CONCLUSIONS

A. Narrative - explain the decisions made. ~~Include~~ **Make a record of the** reasons why other alternatives were dismissed. Include a cost effectiveness table similar to the one below for each pollutant emitted and ~~include~~ **place** it in the conclusion section of your BAT study.

B. Cost Effectiveness Table Example:

Summary of Results, and Emissions Table

Pollutant: Organic Compounds/HAPs

Control Technology	Total Annualized Cost	Potential Emissions (TPY uncontrolled)	Control Efficiency	Annual Emission Reduction (TPY)	Cost per ton removed ($/ton removed)
Thermal Incinerator	*$777,250.05*	*185.90*	*98.60%*	*183.30*	*$4,240.32*
Catalytic Thermal Oxidizer	*$698,628.10*	*185.90*	*95.50%*	*177.50*	*$3,935.93*
** Carbon Adsorption*	*$202,565.60*	*185.90*	*90.40%*	*168.05*	*$1,202.17*

* Allows for the recycling of the captured solvents

Engineering Guide No. XX
Is a Best Available Technology Cost Effectiveness Study Needed?

I. INTRODUCTION

A. Purpose of This Guide

The use of Best Available Technology (BAT) is a State of Ohio requirement for new air contaminant sources that require a Permit to Install (PTI). A Cost Effectiveness Study of various control methods is required for some permit applications; yet it can be a time consuming task. This guide is intended to provide a consistent decision making process for Best Available Technology (BAT) Cost Effectiveness studies. Permit applicants and permit application reviewers can use this guide and accompanying flowchart to determine the need for a BAT Cost Effectiveness study.

In the first part of the flow chart, the federal rules are identified so that they may be evaluated for applicability to some or all portions of a new project. Often, federal requirements take precedence over state BAT requirements.

A BAT determination for many common operations is available by contacting the appropriate ~~field office~~ **district office or local air pollution agency (DO/LAA)**. It may be necessary to study the BAT determinations of other similar operations. The second part of the flow chart provides guidance on comparing BAT determinations from similar operations, to see if a BAT determination for the proposed project may be made. Such a BAT determination process usually does not require a BAT Cost Effectiveness study.

If a cost effectiveness study is required, the permit applicant will find the BAT Study Checklist useful. It identifies the criteria for developing a cost study of various technologies and ~~a~~ provides a suggested format. This checklist should be used in conjunction with Engineering Guide No. 46, *Guidance for Estimating Capital and Annual Costs of Air Pollution Control Systems.*

Pollution prevention (P2) alternatives should be evaluated as a BAT strategy. For BAT, pollution prevention could be evaluated prior to assessing control equipment needs. Source reduction options are considered before capture, control, and treatment options. The benefits of using P2 can include: a potential decrease in emissions that could exempt the emissions unit from permitting requirements; P2 may be less expensive to implement than add-on controls; lower permit and emissions inventory fees; and applicants may avoid triggering Federal permit requirements (e.g., Title V, BACT, LAER or PSD permitting). For more information on pollution prevention, visit Ohio EPA's Office of Pollution

Prevention web site at www.epa.state.oh.us/opp or call them at (614) 644-3469.

B. Definitions

1. **BAT:** "Best Available Technology (BAT) means any combination of work practices, raw material specifications, throughput limitations, emission limitations, source design characteristics, an evaluation of the annualized cost per ton of air pollutant removed, or air pollution control devices that have been previously demonstrated to operate satisfactorily in Ohio or other states with similar air quality on substantially similar air contaminant sources."

   The use of BAT to control air contaminant emissions is an Ohio requirement for any air contaminant source, installed after January 1, 1974, that requires a PTI.

2. **BACT:** Best Available Control Technology (BACT) is a more stringent standard for major stationary sources or major modifications, as defined in Ohio Administrative Code (OAC) Rule 3745-31-01(SS) and in OAC Rule 3745-31-01(RR), respectively, subject to Federal New Source Review permitting under the Prevention of Significant Deterioration (PSD) permitting program. BACT is defined in OAC Rule 3745-31-01(M).

3. **PSD:** Prevention of Significant Deterioration is a permitting process that prevents deterioration of the air quality in areas that are in attainment of the National Ambient Air Quality Standards. The PSD requirements are specified in 40 CFR Part 52.21 and in OAC Rule 3745-31-11 through OAC Rule 3745-31-20.

4. **LAER:** The Lowest Achievable Emission Rate is a requirement that limits emissions of major sources or major modifications in areas that are in non-attainment of the National Ambient Air Quality Standards. The LAER requirements are specified in 40 CFR Part 51, Appendix S and in OAC Rule 3745-31-21 through OAC Rule 3745-31-27. See OAC Rule 3745-31-01(RRR) for the definition of a stationary source.

5. **"Major MACT (Maximum Achievable Control Technology) Source:** Means any process or production unit that in and of itself has the potential to emit ten tons per year or more of any single hazardous air pollutant or twenty-five tons per year or more of any combination of hazardous air pollutants (as listed in section 112(b) of the Federal Clean Air Act)."

   A "MACT Determination" must be developed and approved of by U.S. EPA for Major MACT sources, constructed on or after June 29, 1998, and

which do not have an applicable MACT category standard. See OAC Rule 3745-31-28 for further information.

6. **NESHAP:** National Emissions Standards for Hazardous Air Pollutants are emissions standards for asbestos, benzene, radionuclides, beryllium, mercury, vinyl chloride, arsenic and coke ovens emissions. A list of the NESHAP categories can be found in 40 CFR Part 61. You may wish to download a copy of Part 61 from the website, http://www.access.gpo.gov/nara/cfr/index.html. Click on the "Browse" feature to search for Title 40, then search for "40CFR61 Part 61."

7. **NSPS:** New Source Performance Standards are emissions or performance standards for new or older emissions units. A list of NSPS categories can be found in 40 CFR Part 60. You may wish to download a copy of the Table of Contents for Part 60 from the website, http://www.access.gpo.gov/nara/cfr/index.html. Click on the "Browse" feature to search for Title 40, then search for "40CFR60 Part 60."

8. **BAT Study:** A BAT study documents the results/findings of the permit applicant's evaluation of the technical and economic feasibility of various control methods, to minimize and control air contaminant emissions from emissions units in a construction or modification project, as proposed in a PTI application. A BAT study may be required for an individual emissions unit or for a combination of emissions units. A BAT study, when needed, must be submitted with a PTI application, in order for the application to be deemed complete by the ~~permit reviewing agency~~ **DO/LAA**.

9. "**Modification:** Means any physical change in, or change in the method of, operation of any air contaminant source that:

   a. results in an increase in the allowable emissions; or

   b. results in an increase in emissions of greater than the de minimis levels in OAC Rule 3745-15-05 of any type of air contaminant not previously emitted; or

   c. results in the relocation of the air contaminant source to a new facility, including, but not limited to, the movement of any existing air contaminant source from another state, county, or other geographic location; or

   d. is otherwise defined as a major modification, or is defined as a modification under applicable regulations promulgated by the

Administrator of the U.S. EPA regarding New Source Performance Standards (NSPS) or National Emissions Standards for Hazardous Air Pollutants (NESHAPS) or Section 112 of the Clean Air Act."

10. **Pollution Prevention:** For the State of Ohio, pollution prevention (P2) is the use of source pollution reduction techniques in order to reduce risk to public health, safety, welfare, and the environment and, as a second preference, the use of environmentally sound recycling to achieve these same goals. Source reduction is the reduction or elimination of waste and emissions at the point of generation. Source reduction measures may include process modification, good operating and management practices, increasing the efficiency of machinery, and recycling within a waste generating or other production process. For example, in a coatings operation, P2 options might include the use of low volatile organic compound (VOC) content paints and solvents, or switching to powder coating.

C. Using Discretion With This Guide

This flow chart involves decision making and requires discretion when determining if a BAT study is required. Usually the entire combination of new emission units, or the entire project must first be considered for the BAT study for each pollutant. If none of the proposed technologies are cost effective, then a BAT study should be performed for ~~the larger~~ **individual** emissions units to see if it is cost effective for ~~that~~ **those** units. For modifications, the BAT study should be considered for the amount of the emissions increase occurring due to the modification. The requirement of a BAT study must always be determined on a case-by-case basis. It is advisable to consult the appropriate ~~permit review agency~~ **DO/LAA** prior to submittal of the permit application and any BAT study. **A list of Ohio EPA District and Local Air Pollution Agencies (DO/LAA) is included with the PTI application.**

D. Request for Rule Exemptions

A BAT Study must be performed by applicants that request an exemption to the requirements of OAC Rule 3745-21-07(G) or OAC Rule 3745-21-09(U), as specified in OAC Rule 3745-21-07(G)(9)(g) or OAC Rule 3745-21-09(U)(2)(f), respectively. Contact the appropriate ~~field office~~ **DO/LAA** for further information.

II. FLOWCHART

A. An evaluation must be performed for each pollutant. Is the project a modification as defined in OAC Rule 3745-31-01(VV) and/or does the project involve the

installation of new emissions unit(s)? Permit applicants should discuss their facility's plans with the appropriate field office to confirm this decision.

- Yes - Move to the next question.

- No - BAT Cost Effectiveness study is not required, no PTI application is required.

B. Is this a major stationary source or major modification, as defined in OAC Rule 3745-31-01(SS) or in OAC Rule 3745-31-01(RR), respectively?

- Yes - A State BAT study is not required. If a facility is in a non-attainment area, the lowest achievable emissions rate (LAER) is applicable to that project. If a facility is in an attainment area, the Prevention of Significant Deterioration (PSD) rules are applicable and a Best Available Control Technology (BACT) review is required. In either case, LAER or BACT will meet state BAT requirements.

  Contact the appropriate ~~field office~~ **DO/LAA** to find whether a county is in attainment status for criteria pollutants (i.e., particulate matter, volatile organic compounds, carbon monoxide, nitrogen oxides or sulfur dioxide). ~~A list of Ohio EPA District and Local Air Pollution Agencies is included with the PTI application.~~

- No - Move to 112(g) box.

C. Are the 112(g) regulations applicable?

- Yes - Conduct a 112(g) control technology study and obtain a "MACT determination." A BAT Cost Effectiveness study is not needed, since compliance with 112(g) meets State BAT requirements. The pollutant does not need to meet the Air Toxic Policy.

- No - Move to MACT, NSPS, NESHAP box.

D. Are the requirements of Maximum Available Control Technology (MACT) category standards, New Source Performance Standard or NESHAP applicable?

- Yes - Move to five (5) years question box.

- No - The pollutant is subject to the Air Toxic Policy.

Is the applicable MACT standard, NSPS regulation and/or NESHAP older than five (5) years old?

- Yes - The pollutant is subject to the Air Toxic Policy.

- No - No BAT Cost Effectiveness study required. According to Ohio Revised Code (ORC) 3704.03(T), BAT is determined to be the NSPS requirements for that emissions unit(s) if the standards have been finalized within the past five (5) years. Compliance with a MACT category standard or NESHAP standard, which was finalized within the past five (5) years, ~~may~~ **is considered to** meet State BAT requirements~~;~~. **The Air Toxic Policy does not apply.** Contact ~~your local air agency or district office representative~~ **the appropriate DO/LAA** for further assistance. ~~The Air Toxic Policy does not apply.~~

E. Does the pollutant need to comply with the Air Toxic Policy?

- Yes - The results of the air toxic policy evaluation should be included in the BAT determination.

- No - Move to "Identify all similar emissions units" box.

F. Check previous BAT determinations for substantially similar emissions units **that operate satisfactorily in the state of Ohio or other states with similar air quality**. The determination of similar sources is a judgement, which takes into account the following factors:

1. Do the processes have the same design and operation?

2. Do the processes have approximately the same capacity?

3. Do the processes emit the same or similar air pollutants?

4. Can the processes be controlled by the same type of control technology?

5. Is the volume or concentration of the pollutants approximately the same?

Check the BAT database, previously issued PTIs, and BACT databases. The state BAT database can be found on Ohio EPA's web page, www.epa.state.oh.us/dapc /files/files.html. The allowable limits may be based on restrictive limits that were accepted to avoid federal requirements and these restrictive limits may not

constitute State BAT. You may contact the appropriate field office for further assistance.

Another source of information is the National BACT/LAER clearinghouse available at http://www.epa.gov/ttn/, then select the RBLC option.

G. Do the potential emissions (prior to controls or pollution prevention alternatives) or the requested permitted limits from the emissions unit or project exceed the trigger levels: 200 TPY CO, 80 TPY NO_X, 80 TPY SO_X, 50 TPY PE, 30 TPY ~~PE_{10}~~ **PM_{10}**, 80 TPY VOC, and 1.2 TPY Lead.

- Yes - Move to "Contact the Field Office" box.
- No - Move to "Are the new sources within 12% of best similar sources" box.

Are the new sources exactly identical to recent BAT sources? The comparison of BAT for similar sources is a judgement, which takes into account the following factors:

1. Do the sources have identical equipment?
2. Do the sources have identical maximum capacity?
3. Do the sources have identical emission rates?
4. Do the sources have identical pollutants?
5. Do the sources make identical products?
6. Have the sources been installed within the past five (5) years?

Yes - No BAT Cost Effectiveness study is required.

No - A BAT Cost Effectiveness study is required. Please refer to the BAT study checklist for more information about how to conduct and submit a BAT study. The "*Guidance for Estimating Capitol and Annual Costs of Air Pollution Control Systems*" study can be found in Engineering Guide No. 46 on Ohio EPA web page, www.epa.state.oh.us/dapc/engineer/eguides .html.

H. Do contact the appropriate ~~field office~~ **DO/LAA** for guidance in conducting a BAT determination study of substantially similar sources, especially if they are not exactly identical. A permit applicant may wish to employ the services of a

consultant to prepare the study of similar sources and propose a BAT determination.

I. Are the sources within 12% of the best controlled similar sources?

Yes - No BAT Cost Effectiveness study is required.

No - Move to "Are the new sources better than average of top five (5) of best controlled similar sources" box.

J. Are the new sources better than average of top five (5) of best controlled similar sources?

Yes - No BAT Cost Effectiveness study is required.

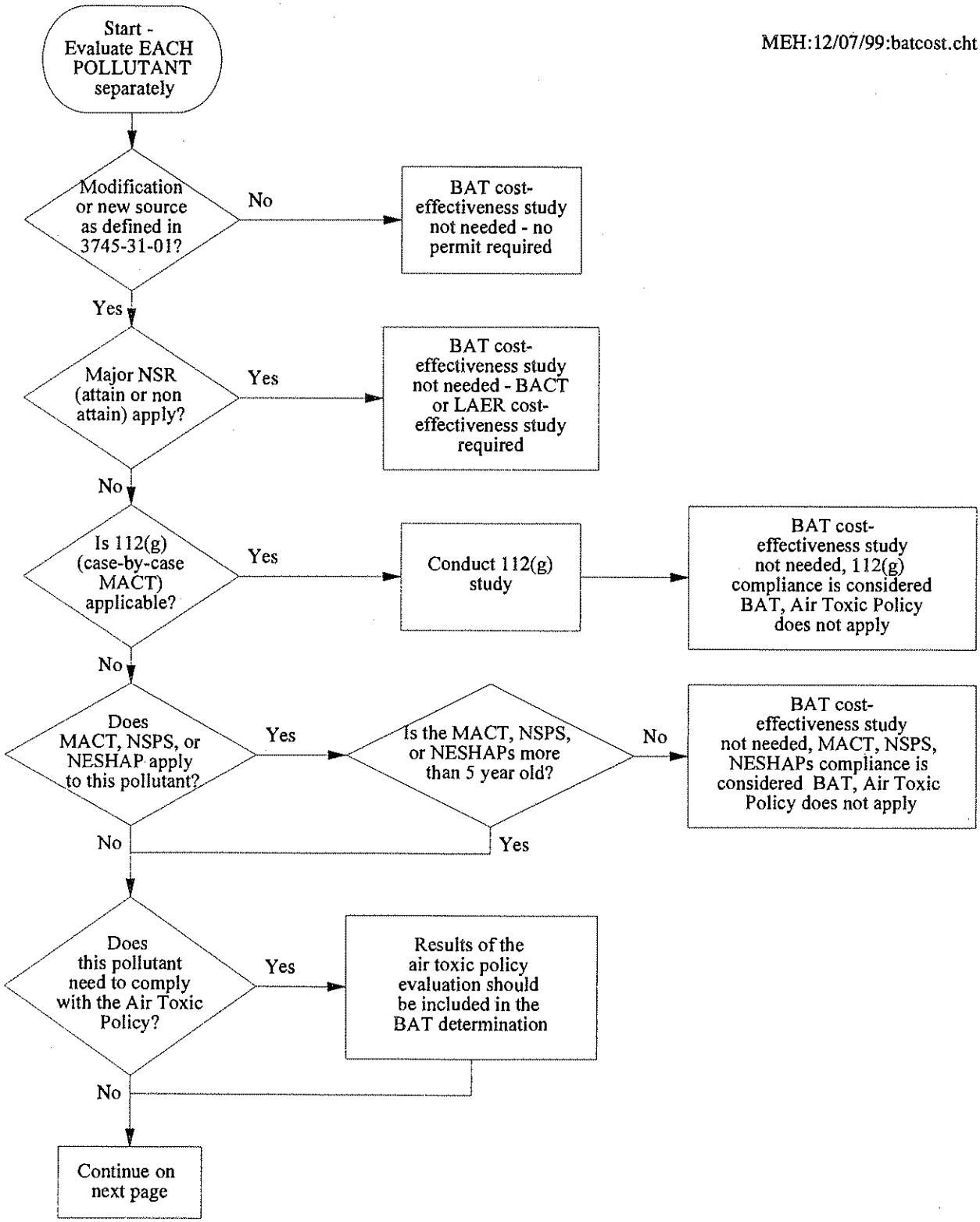
No - Ohio EPA will review the similar sources and make a BAT determination.

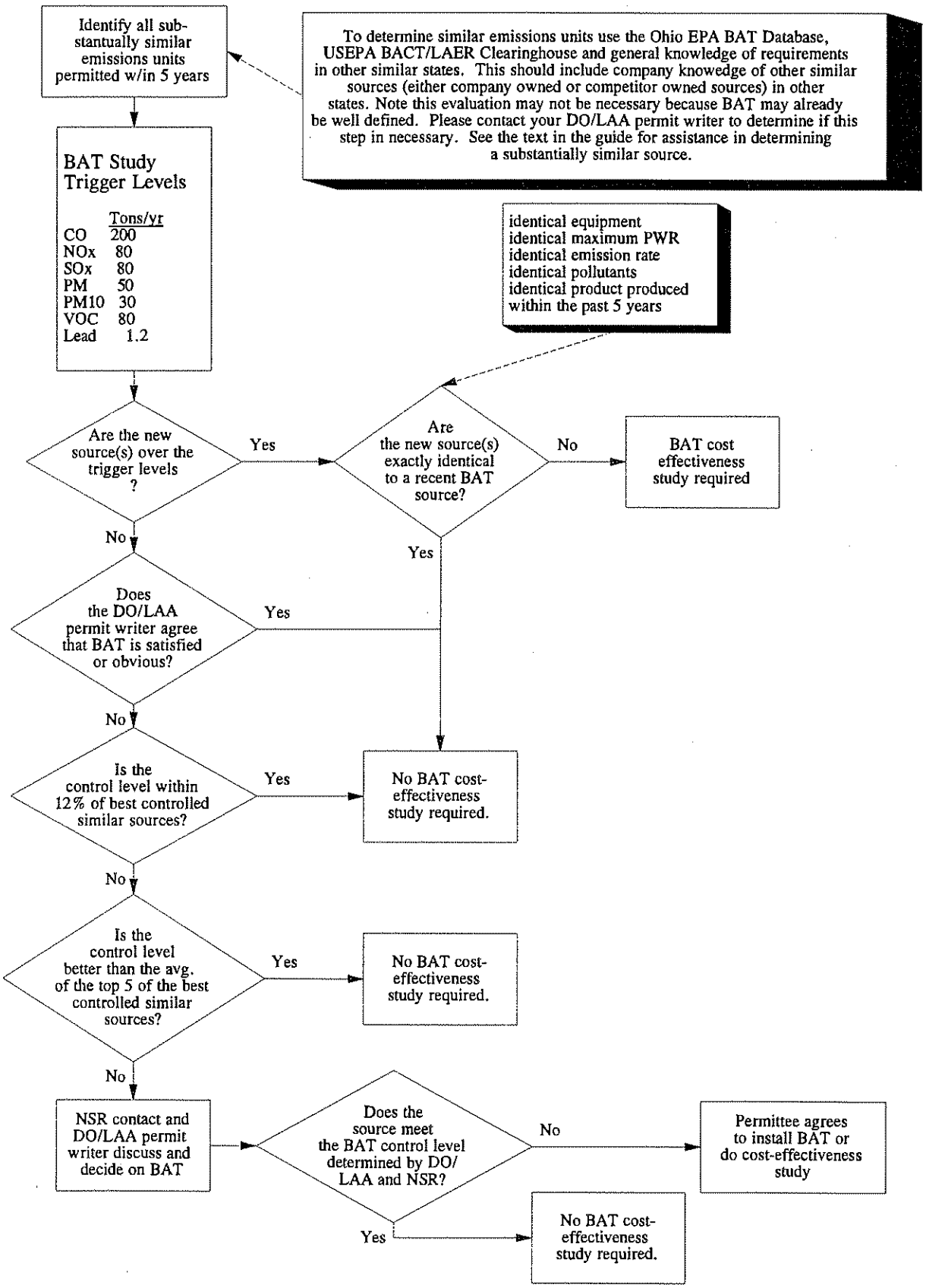
K. Do the new sources meet Ohio EPA BAT determination?

Yes - No BAT Cost Effectiveness study is required.

No - The permit applicant agrees to install BAT or do a cost effectiveness study.

BAT Cost-Effectiveness Study Decision Flow Chart




Identify all substantually similar emissions units permitted w/in 5 years
To determine similar emissions units use the Ohio EPA BAT Database, USEPA BACT/LAER Clearinghouse and general knowledge of requirements in other similar states. This should include company knowedge of other similar sources (either company owned or competitor owned sources) in other states. Note this evaluation may not be necessary because BAT may already be well defined. Please contact your DO/LAA permit writer to determine if this step in necessary. See the text in the guide for assistance in determining a substantially similar source.
BAT Study Trigger Levels
Tons/yr
CO 200
NOx 80
SOx 80
PM 50
PM10 30
VOC 80
Lead 1.2
identical equipment
identical maximum PWR
identical emission rate
identical pollutants
identical product produced
within the past 5 years
Are the new source(s) over the trigger levels ?
Yes
Are the new source(s) exactly identical to a recent BAT source?
No
BAT cost effectiveness study required
No
Yes
Does the DO/LAA permit writer agree that BAT is satisfied or obvious?
Yes
No
Is the control level within 12% of best controlled similar sources?
Yes
No BAT cost-effectiveness study required.
No
Is the control level better than the avg. of the top 5 of the best controlled similar sources?
Yes
No BAT cost-effectiveness study required.
No
NSR contact and DO/LAA permit writer discuss and decide on BAT
Does the source meet the BAT control level determined by DO/LAA and NSR?
No
Permittee agrees to install BAT or do cost-effectiveness study
Yes
No BAT cost-effectiveness study required.

Cooper Engineering Products

CAPITAL COSTS	Cost Factors	Units	Adjustment Factor	Costs	Formula
Direct Costs					
Control Equipment				360000	Purchase Cost, A
Instruments and controls	0.1		1	36000	CF*A
Taxes	0.0575		1	20700	CF*A
Freight	0.05		1	18000	CF*AF*A
Base Price				434700	Total of Above, C
Installation	0			142000	CF*C
Indirect Costs					
Engineering & Supervision	0.1		1	43470	CF*C
Construction/Field Exp	0.05		1	21735	CF*C
Construction Fee	0.1		1	43470	CF*C
Start-up	0.02		1	8694	CF*C
Performance Tests	0.01		1	4347	CF*C
Model Study	0.01		1	4347	CF*C
Contingencies	0.03		1	13041	CF*C
Total Indirect Costs				139104	Total of Above
Total Capital Costs				715804	Base Price + Install + Indirect,D
ANNUALIZED COSTS					
Direct Costs					
Operating Labor	18.23	$/hr		9951	E
Supervision	0.15			1493	CF*E
Operating Materials	1,100 per month		12 month/yr	13200	CF*E
Maintenance Labor	18.23			9954	CF*E, F
Maintenance Materials	1			9954	CF*F
Replacement Parts	0.01			7158	CF*D, G
Labor	1			7158	CF*G
Utilities					
Electricity	0.05	kWh		12702	both
Fuel	2.7	$kCF		25781	
Cooling Water				0	
Waste Disposal					
Indirect Costs					
Overhead	0.8			15924	CF*(E+F)
Property Tax	0.01			7158	CF*D
Insurance	0.01			7158	CF*D
Administration	0.02			14316	CF*D
Equipment life	10	years			
Capital Recovery Interest	8	%			
Capital Recovery	0.1490295			106676	CF*D
Total Annualized Costs				248583	
VOCs Controlled, Tons/yr				3.65	
COST EFFECTIVENESS, $/ton				$68,104.88	

Best Available Technology (BAT) Requirements

Does everything in a permit to install go in the "State and Federally Enforceable Section", except for the Air Toxic language?

Yes, except for rules that are not part of the SIP and not referenced as a BAT requirement.

What about rules that are not part of the State Implementation Plan (SIP)?

In general, rules that are not part of the SIP will go on the "State Enforceable Section" of the permit; however, if compliance with a rule that is not part of the SIP is determined to be part of BAT, then that rule will have to be placed on the "State and Federally Enforceable Section" of the permit. In addition, we have developed clarifying language for OAC Chapter 3745-17 that is in the "State and Federally Enforceable Section" even though the revised rule language has not been incorporated into the SIP (see language below).

OAC rule 3745-17-07(B)(7) - "The procedures related to Test Method 9 reflect the settlement agreement reached between Ohio EPA and the Ohio Electric Utilities concerning the Utilities' appeal to the Ohio Environmental Review Appeals Commission of the 1991 revisions and additions to OAC Chapter 3745-17. The revised rule containing these procedures was adopted by the Director of Ohio EPA in December, 1997. The USEPA and the Ohio Electric Utilities have agreed to consider the procedures as federally enforceable during the time from the effective date of this permit to the effective date of USEPA approval of the procedures as a revision to the Ohio SIP for particulate matter."

OAC rule 3745-17-11(B)(5)(a) and (b) - "The emission limitation specified in this rule citation has been revised based upon a change in the applicable emission factor contained in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors. The revised rule was adopted by the Director of Ohio EPA in December, 1997. The USEPA has agreed to consider this revised rule as federally enforceable during the time from the effective date of this permit to the effective date of USEPA approval of this limitation as a revision to the Ohio SIP for particulate matter."

What about ton-per-year emission limitations that are not rolling or that are redundant with the short term emission limitations?

All of the ton-per-year emission limitations should go in the "State and Federally Enforceable Section" of the permit.

On which side of the permit should OAC rule 3745-15-07 be cited?

OAC rule 3745-15-07 is already cited in the "State Only Enforceable Section" of the General Terms and Conditions (see Term and Condition B.5.) It will not be necessary to cite OAC rule 3745-15-07 in the "State and Federally Enforceable Section" of the permit unless the rule is referenced as part of BAT. If compliance with OAC rule 3745-15-07 is considered part of BAT,

then the rule would be referenced using the "equally stringent" language specified below; however, the applicable requirement would be OAC rule 3745-31-05.

What language should be used to address "less stringent" or "equally stringent" SIP emission limitations when there is an overriding BAT emission limitation?

If the emission limitation from the OAC rule is equivalent to the emission limitation established pursuant to OAC rule 3745-31-05, the following language can be used:

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emission Limitations/Control Measures
stationary gas turbine *(for example)*	OAC rule 3745-31-05(A)(3)	The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-11(B)(4). ***This wording would be used in situations where the BAT determination includes requirements that are rule-based <u>and</u> requirements that are not rule-based. This wording should be expanded, if necessary, to identify all the OAC rules that comprise part of the BAT determination.***
	OAC rule 3745-17-11(B)(4)	Particulate emissions shall not exceed .040 lb/mmBtu of actual heat input.
	OR	
	OAC rule 3745-31-05(A)(3)	The requirements established pursuant to this rule are equivalent to the requirements of OAC rule 3745-17-11(B)(4). ***This wording would be used in situations where the BAT determination includes <u>only</u> rule-based requirements. This wording should be expanded, if necessary, to identify all OAC rules that comprise the BAT determination.***
	OAC rule 3745-17-11(B)(4)	Particulate emissions shall not exceed .040 lb/mmBtu of actual heat input.

If the emission limitation from the OAC rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05, the following language can be used:

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emission Limitations/Control Measures
stationary gas turbine *(for example)*	OAC rule 3745-31-05(A)(3)	Particulate emissions shall not exceed .020 lb/mmBtu of actual heat input.
	OAC rule 3745-17-11(B)(4)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

Should paragraphs (A)(3) and (D) of OAC rule 3745-31-05 be the only paragraphs cited for requirements established in a permit to install?

No, if requirements are created in the permit to install specifically pursuant to paragraphs (C), (E), (F), and/or (G), and they go beyond BAT or paragraph (D) requirements, then that paragraph should also be cited as an applicable requirement in the permit.

(02/23/00)

SHOULD BE COMPARED TO THE VALUES IN THE ENGINEERING GUIDE

:kwell International Newark

CAPITAL COSTS	Cost Factors	Units	Costs	Formula
Direct Costs				
Control Equipment			1300000	Purchase Cost, A
Instruments and controls	0.1		0	CF*A
Taxes	0.05		0	CF*A
Freight	0.05		0	CF*A
Base Price			1300000	Total of Above, C
Installation	0.3		390000	CF*C
Indirect Costs				
Engineering & Supervision	0.05		65000	CF*C
Construction/Field Exp	0.1		130000	CF*C
Construction Fee	0.1		130000	CF*C
Start-up	0.02		26000	CF*C
Performance Tests	0.01		13000	CF*C
Model Study	0		0	CF*C
Contingencies	0.03		39000	CF*C
Total Indirect Costs			403000	Total of Above
Total Capital Costs			2093000	Base Price + Install + Indirect, D

ZEROED OUT BECAUSE BID INCLUDES COSTS IN PURCHASE PRICE

→ IMPORTANT #. ALL OTHER COSTS ARE BASED ON THIS.

NNUALIZED COSTS				
:ects Costs				
Operating Labor	14.5	$/hr	3625	E
Supervision	0.15		543.75	CF*E
Operating Materials	0.0075		6912	CF*E
Maintenance Labor	0.1		362.5	CF*E, F
Maintenance Materials	1		362.5	CF*F
Utilities				
Electricity	0.07	kWh	278009	both
Fuel	4	$/MMB	0	
Cooling Water			0	
Waste Disposal				
Indirect Costs				
Overhead	0.8		3190	CF*(E+F)
Property Tax	0.01		20930	CF*D
Insurance	0.01		20930	CF*D
Administration	0.02		41860	CF*D
Equipment life	10	years		
Capital Recovery Interest	8.5	%		
Capital Recovery	0.15241		318989.3	CF*D
Total Annualized Costs			695714.1	
VOCs Controlled, Tons/yr			120.9	
COST EFFECTIVENESS, $/ton			5754.459	

SOMETIMES INFLATED

INCINERATOR COSTS

CFM	CONTROL	TYPE	PURCH. COST
3000	CATALYTIC	95	128,000
3000	RECUP	95	146,000
15000			375,000
25000			750,000
50,000			1,000,000
10,000	THERMAL		427,000
10,000	CATALYTIC		410,700
10,000	CONDENSATION		502,000
90,000	RECUP		1,300,000
90,000	RECUP		1,870,000
90,000	CATA		1,199,000
14,000	RECUP		335,000

→ INCINERATORS THAT OPERATE CONTINUOUSLY CAN HAVE A 15 YR LIFE

→ CAPITAL RECOVERY CAN RANGE FROM 6-15 %. 8.5 % IS TYPICAL. DEPENDING ON RATE BANKS ARE WILLING TO GIVE TO COMPANY. ANYTHING AT 10 OR ABOVE SHOULD BE JUSTIFIED.

inter-office communication

to: DO Air Unit Supervisors/LAA Directors date: April 27, 1989

from: Bob Hodanbosi, Manager, AQM&P Section/DAPC

subject: Use or Substitution of CFC's

We have recently received two questions from industry regarding the use or substitution of CFC's. The questions and our responses are as follows:

Question 1: Our existing facility presently uses a CFC that is exempt under the volatile organic compounds (VOC) rules, but is considered a "controlled" CFC under the Montreal Protocol. We plan to switch to a CFC that is less harmful to the upper level ozone layer in order to comply with the Montreal Protocol. Must our company apply for a permit to install (PTI) to accommodate this change?

Answer 1: No, a new PTI is not required, provided that the substitute CFC is considered to be less than or equal to in toxicity to the present CFC and the substitute CFC is not considered to be a VOC by U.S. EPA.

Question 2: Our company plans to install a new facility that will employ substitute CFC's that will comply with the Montreal Protocol. Is a PTI necessary for the construction of the new source?

Answer 2: Yes, a PTI is required. Under the PTI rules, all new sources of air contaminants must obtain a PTI. The rules do not exempt CFC's from the requirement for a permit. During the review for best available technology (BAT), applicants should be required to examine standard control technologies for organic compounds. Also, facilities should evaluate the use of substitute CFC's (chlorodifluoroethane HCFC-142b, dichlorofluoroethane HCFC-141b, tetrafluoroethane HFC-134a, dichlorotrifluoroethane HCFC-123) that are less harmful to the upper atmosphere instead of the CFC's controlled by the Montreal Protocol (trichlorofluoromethane CFC-11, dichlorodifluoromethane CFC-12, trichlorotrifluoroethane CFC-113, dichlorotetrafluoroethane CFC-114, chloropentafluoroethane CFC-115, bromochlorodifluoroethane Halon 1211, bromotrifluoroethane Halon 1301, dibromotetrafluoroethane Halon 2402).

If you have any questions, please contact me at (614) 644-2270.

BH:jlc

MAY 04 1989

PORTSMOUTH LOCAL AIR AGENCY

GEN 1001 (3/84)

PETE V. DOMENICI
NEW MEXICO

S/C Directors, MIKE K 933317

COMMITTEES:
BUDGET
APPROPRIATIONS
ENERGY AND NATURAL RESOURCES
BANKING
INDIAN AFFAIRS

United States Senate
WASHINGTON, DC 20510-3101

'93 AUG 23 A11:40

July 30, 1993

REGIONAL

AUG 30 1993

The Honorable Carol Browner
Administrator, Environmental Protection Agency
401 M Street SW
Washington, DC 20460

Dear Carol:

Recently the Air and Radiation Division of EPA's Region V wrote to the Michigan Department of Natural Resources regarding a General Motors proposal to switch from coal and oil fuels for a number of industrial boilers to cleaner burning natural gas.

That letter indicated, in brief, that since the change would not increase use, and would result in lower emissions, New Source Review provisions of the Clean Air Act would not be triggered, thereby relieving GM of the regulatory paperwork burden which might otherwise have been invoked.

I would like to commend the Region for this carefully reasoned approach to application of the regulations, and ask that you consider making this a national policy. Since the goal of the Clean Air Act is to provide better air quality, it makes a great deal of sense to make it easier for businesses to switch to cleaner burning fuels when that will reduce their overall emissions. Encouraging businesses nationwide to switch to such fuels could achieve significant environmental improvement, while lowering costs for many industries.

Sincerely yours,

Pete V. Domenici
United States Senator

PVD/lmk

Received
SIGS ARC

Inter-office Communication

TO: NSR Contacts *DATE:* June 23, 1993

FROM: Bob Hodanbosi, Chief - DAPC

SUBJECT: New Source Review topic of interest.

Please review the attached memo from David Kee of the U.S. EPA. The U.S. EPA recently determined that the conversion from coal to natural gas for a boiler would not entail New Source Review if there was no increase in emissions due to the change in fuel. The determination was based on specific circumstances and data presented by General Motors to U.S. EPA. Apparently, GM was able to demonstrate that the emission factors for all relevant pollutants would decrease, and that neither the rate of production nor hours of operations of the facilities would increase. This determination is contrary to the policy of reviewing emissions based on the potential to emit. Furthermore, it appears that U.S. EPA is acknowledging that natural gas is a cleaner burning fuel, and consequently it appears that U.S. EPA does not want to deter companies from switching to cleaner burning fuel. Please note, however, that we do not know what information GM presented to U.S. EPA which allowed for this determination.

Please insert the attached memo into your New Source Review guidebook for future reference.

attachment

OhioEPA
State of Ohio Environmental Protection Agency

P.O. Box 1049, 1800 WaterMark Dr.
Columbus, Ohio 43266-0149
(614) 644-3020
FAX (614) 644-2329

MISTY | ~~[illegible]~~ | ANN B.
** IMPORTANT
MAY 13 1993
NOTE THE CHANGE IN DIRECTION

George V. Voinovich
Governor

Donald R. Schregardus
Director

WE NEED TO KEEP THIS LETTER FOR FUTURE REFERENCE.

BQ

MEMORANDUM

TO: Robert Hodanbosi, Chief, DAPC

FROM: Grant W. Wilkinson, Deputy Director of Legal Affairs

SUBJECT: General Motor's Clean Fuel Boiler Conversions

DATE: May 17, 1993

The General Motor's Chevrolet - Pontiac - Canada Group Plant, located in Parma, Ohio, has requested that the air use permits for two coal-fired boilers (permits to operate NOS. 13-18-45-1029 B001 and B002) be amended to allow the use of natural gas. General Motors was initially informed that the conversions would require permits to install and the application of new source review because the conversion had the potential to result in a significant net emissions increase.

General Motors responded that the use of cleaner fuels should not require new source review. General Motors reasoned that a "significant net emissions increase" will not result from the proposed conversion. Instead, the use of natural gas will decrease the emissions of nitrogen oxide, sulfur dioxide, carbon monoxide, total suspended particulate, and volatile organic compounds. Accordingly, on August 31, 1992, General Motors asked the Cleveland Division of Air Pollution Control to withhold further action on its permit pending a final determination of this issue by U.S. EPA.

By letter dated April 6, 1993, Dave Kee informed Dennis Drake, Acting Chief of Michigan Department of Natural Resource's Air Quality Division, that, in U.S. EPA's view, "General Motor's proposed natural gas conversion projects should not be considered a major modification under the Federal New Source Review regulations". (A copy of the letter is attached for your review).

In light of the above, and given the significant environmental benefit, I encourage you to adopt the same approach in the case of the Parma, Ohio facility. Please notify the Cleveland Division of Air Pollution Control of this development and U.S. EPA's recent interpretation.

cc: Jim Orlemann, Manager, Engineering Section, DAPC
Brian Babb, Acting Deputy Director
Jeanne Mallett, Legal Supervisor

GWW/cmw

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
AIR AND RADIATION DIVISION
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

APR 06 1993

REPLY TO THE ATTENTION OF:
(AT-18J)

Dennis Drake, Acting Chief
Air Quality Division
Michigan Department of Natural Resources
P.O. Box 30028
Lansing, Michigan 48909

Dear Mr. Drake:

This letter concerns a proposal by General Motors (GM) to burn natural gas in existing industrial boilers at an estimated 16 sites in the State of Michigan, and 12 other sites in Region 5. The units at issue currently burn coal or fuel oil. During a February 23, 1993, telephone conference between GM, the United States Environmental Protection Agency (USEPA), and the Michigan Department of Natural Resources to discuss these alternate fuel projects, GM was asked to provide a demonstration that a change in fuels would not affect future auto production rates at these facilities.

The data provided by GM in a March 9, 1993, letter indicate that the utilization rate of the boilers would not be influenced by a switch to this more economical fuel because (1) the total steam cost at a given plant is insignificant when compared to the total operating cost at that plant, and (2) the steam production is primarily determined by climate conditions, not auto production rates.

The New Source Review (NSR) regulatory provisions require that a proposed physical change result in an increase in actual emissions in order for the change to be considered a modification and therefore subject to NSR. See, e.g., 40 Code of Federal Regulations 52.21(2)(i). In this case, the proposed switch to natural gas at various GM facilities will result in substantial reductions in the emissions factors of particulate matter, sulfur dioxide, and, in most cases, oxides of nitrogen, as well as air toxics. The use of natural gas will also result in a substantial cost savings for the source. In general, where a source makes a change that reduces the costs of production, such changes usually affect the utilization of the facility. In this case, GM has clearly demonstrated that the utilization rate of the boilers will not be affected by the proposed fuel switch to natural gas. Consequently since the emissions factors for all relevant pollutants will decrease and neither the rate of production nor hours of operations of the facilities will increase as a result of the change, USEPA has determined that the proposed

MAY 13 1993

projects will not result in an increase in emissions. Therefore, based on the specific circumstances and data presented, it is USEPA's view that GM's proposed natural gas conversion projects should not be considered a major modification under the Federal New Source Review regulations.

If you have any questions with regard to this letter, please contact me.

Sincerely yours,

Steve Rudolph, for

David Kee, Director
Air and Radiation Division

Promoting cost savings . . .

EPA, STATES WORKING WITH GENERAL MOTORS TO DEVELOP FLEXIBLE FUEL-USE POLICY

EPA and several states are working with General Motors Corp. to investigate ways to allow seasonal fuel switches within a source's existing air permit, a move agency officials expect will set a precedent for allowing fuel switching under existing permits at all sorts of facilities. EPA has indicated its intention to develop an "interim policy" excluding fuel switching to cleaner-burning natural gas from new source review as long as increases in actual emissions do not occur. The agency's decision to consider a more flexible fuel-switching policy comes in response to concerns that the NSR regulations discouraged use of lower emitting fuels.

EPA regional officials and state air regulators are collaborating with representatives of the General Motors Corp. to determine whether a federal policy incorporating the ability to fuel switch to natural gas can be extended to all source categories without triggering new source review. The test project participants are reviewing existing state policies to see if the test project with GM facilities can be accommodated within the context of the operating permit program, since any fuel switch would have to be included in a source's permit.

Agency officials decided to team up with GM after the U.S. automaker indicated its desire to add the capability to burn natural gas, which is cleaner than coal and oil. Their operating permit, however, did not allow a fuel switch since their facility permits only allow burning coal.

EPA appears likely to approve a federal seasonal fuel switching policy, particularly since fuel switching is being discussed as a method to meet the requirements of title I for nitrogen oxide reductions (see Feb. 25 issue, p7). The only foreseeable stumbling block appears to be how the policy would be enforced and how EPA will determine whether a company actually did switch to a cleaner burning fuel. State air regulators in Michigan and Ohio, for example, where General Motors operates automobile manufacturing facilities, are being asked to review existing air permits for industrial boilers and their modifications in order to preserve the ability to switch from one fuel to another, explained an EPA official. State officials could not be reached for comment.

The agency currently requires existing units to be permitted in order to burn fuels such as coal, wood wastes and tires, even though burning natural gas emits less air pollution. The agency's "interim" policy change, which was announced at a March 17-18 NSR simplification workshop in North Carolina, would eliminate that requirement, enabling sources to lower their emissions by burning natural gas.

GM representatives are very excited about the prospect of making this compliance option work within the framework of their facility operating permits. One company representative is encouraged that EPA and states are supporting this process without the threat of prevention of significant deterioration reviews, as they think it will work at other industrial and government-owned facilities as well. This is not a resolution unique to GM, the representative stressed.

EPA's interim policy would be incorporated into the NSR rulemaking by memorandum first, according to an agency official. After the new source review proposed rule is issued later this year, the new fuel-switching policy, among several others, would become part of the final regulation. An EPA official explains that the agency is working on an NSR simplification package and a rule package for the program's statutory requirements which likely will be issued as two separate EPA actions.

Initial project results are expected to be available in approximately one month. EPA is expected to make its NSR policy decision sometime later this spring, in time for states to conduct permit reviews regarding sources' ability to fuel switch.

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Governor

Donald R. Schregardus
Director

Mr. Doug Seaman
Cleveland Bureau of Air Pollution Control
1925 St. Clair
Cleveland, Ohio 44114

June 22, 1993

Dear Doug:

This letter is in regards to the General Motor's Chevrolet - Pontiac - Canada Group Plant, located in Parma, which would like to switch from coal to natural gas for their boilers (source nos. 13-18-45-1029 B001 and B002). In a memo from Mr. David Kee (U.S. EPA) to Mr. Dennis Drake (Michigan Department of Natural Resources), the U.S. EPA determined that switching to natural gas would not involve the requirements of New Source Review if the emissions did not increase due to the switch. This determination was based on specific circumstances and data presented to U.S. EPA by General Motors Corporation. The U.S EPA had requested that GM provide a demonstration that a change in the fuels would not affect future auto production rates at these facilities. GM was able to show that the utilization rate of the boilers will not be affected by the proposed fuel switch. Furthermore, GM demonstrated that the emissions factors for all relevant pollutants will decrease and neither the rate of production nor hours of operations of the facilities will increase as a result of the change. Consequently, the U.S. EPA determined that there will not be an increase in emissions, therefore, the sources would not be subject to the New Source Review requirements for major sources. Please review the attached memos. It is important to note, however, that we do not know what information was presented to the U.S. EPA by General Motors.

I believe that the determination by U.S. EPA may apply to the Parma facility as well. Consequently, provided there will not be an increase in emissions due to the fuel change, nor an increase in the rate of production or hours of operation of the facility, this project should be permitted without involving the requirements of New Source Review applicability. Please examine the circumstances involved with the Parma facility to determine if these conditions will be satisfied.

If you have any questions in regards to this letter, please contact Jim Braun of my staff at (614)644-3617.

Sincerely,

Robert Hodanbosi, Chief
Division of Air Pollution Control

RH/JB
attachment

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New Source Review Contacts

FRANK MARKUNAS ~~Jerry Garro~~, Akron
Pat Shriver, Canton
Dan Schiltz, Canton
Brad Miller, SWOAPCA
DOUG SEAMAN ~~Ted Esborn~~, Cleveland
CURT MARSHALL ~~Dan Erchul~~, RAPCA
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Phil Hinrichs, SWDO
BOB HODANBOSI, DAPC
JIM BRAUN, DAPC
ALAN LLOYD, DAPC
MISTY PARSONS, DAPC

July 22, 1992

MISTY - ANY COMMENTS?
Bob

Chevrolet·Pontiac·Canada Group

Parma Plant
General Motors Corporation
P.O. Box 30098
Parma, Ohio 44130

April 15, 1992

APR 20 1992

Mr. A. L. Ang, Engineer
Division of the Environment
Bureau of Air Pollution Control
1925 St. Clair Avenue
Cleveland, Ohio 44114

Re: New Source Performance Review Concerns for the Gas Conversion of C-P-C Parma Boiler Nos. 1 & 2
[Ohio EPA Source Nos. 13-18-45-1029 B001 & B002]

Dear Mr. Ang:

The General Motors Chevrolet-Pontiac-Canada Group Plant, located in Parma, Ohio, operates two coal-fired boilers under Permits to Operate (Ohio EPA Source Nos. 13-18-45-1029 B001 & B002). As you may recall, on February 21, 1991, I met with you and Commissioner T. J. Esborn to discuss the gas conversion project. At the close of the meeting, you were provided new Appendix Bs, with the understanding that our permits to operate would be amended to allow these boilers to also fire natural gas. Based on our discussion, it was our understanding that this was all that was required to allow the conversions to proceed. In fact, when we received Proposed Special Terms and Conditions for Permits to Operate for Two "Gas/Coal-fired" Steam Boilers, Boiler Nos. 1 and 2, it appeared the gas conversion was recognized. However, on March 20, 1992, during your annual inspection visit, you advised us that we needed to file Permits to Install (PTI) for these two burners. When we questioned this requirement, you advised us to contact Mr. Robert Hodanbosi, Manager of the OEPA Air Quality and Planning Section.

Mr. Hodanbosi was contacted on March 24, 1992. He recommended we perform calculations to determine if any contaminants emitted while burning natural gas exceeded **by forty (40) tons per year or more** those same contaminants when coal is burned. If none are exceeded, no problems exist and PTIs are not required. As you will find in the following information and attached graphs, the use of natural gas does not cause an increase in emissions; indeed, because natural gas generates less pollutants than coal, emissions will decrease.

Boiler Nos. 1 and 2 have a permitted capacity of 128 MMBtu/Hr, each. Using natural gas instead of coal will not affect the steam generating capacity of either boiler, but will result in considerable reductions in emissions of total suspended particulate (TSP), sulfur dioxide (SO_2), oxides of nitrogen (NOx) and carbon monoxide (CO). Maximum potential emissions from these boilers when burning coal and natural gas are:

Emissions (Tons/Year)	TSP	SO_2	NOx	CO	VOC
Coal	146	2,018	627	224	3
Natural Gas	5.34	0.64	190.62	37.38	2.99

We believe the modifications we are implementing are neither physical nor operational changes which trigger new source review analysis. Rather, adapting these boilers to burn natural gas, in addition to coal, results in lower emissions (see attached graphs) and ensures our energy supply. Because emissions will be reduced by use of a less polluting fuel, adapting the units to accommodate the burning of these fuels should not be considered a "physical or operational change." Use of this alternate fuel results in a reduction of air pollution emitted from this facility, and should therefore be excluded from new source review analysis. [see 56 Fed. Reg. 27630, 34-35 (June 14, 1991)]

Even if it were determined that these changes are a physical or operational change, then a new source review permit is required <u>only</u> if a "significant net emissions increase" would result from the physical or operational change. A net emissions increase only occurs where the physical or operational change increases emissions of nitrogen oxide (NOx), sulfur dioxide (SO_2) or volatile organic compounds (VOC) by 40 tons per year, total suspended particulate (TSP) by 25 tons per year, carbon monoxide (CO) by 100 tons per year, or lead (Pb) by 0.6 tons per year. [40 CFR §51.165(a)(1)(x)].

The use of natural gas will decrease all of these emissions. Since a "significant net emissions increase" will not result from the proposed adaptation, a new source review permit is not required. [see 40 CFR §51.165(a)(1)(vi)(A)] Because there is a decrease in all emissions, attributable to the low pollutant fuel, new source review does not apply.

The new source regulatory scheme has always been based on the premise that the physical or operational change in question causes a "significant" increase in emissions. Utilization of existing allowed capacity through increased hours of operation or production rate is specifically excluded from the definition of physical and operational change. [see 40 CFR §51.165(a)(1)(v)(C)(6)] Currently, each boiler is allowed to operate a maximum of 8,760 hours per year. These boilers have not operated at full capacity because of the depressed automobile market and reduced demand at the facility. When the automobile industry recession ends, we will wish to take advantage of the improved market which may require operating boilers at the currently allowed rate. Since we can presently accommodate such projected demand growth independent of the use of an alternate fuel, there is clearly no causal link between the use of this fuel and any increased future emissions. The mere substitution of fuel, made possible by this adaptation, does not cause an increase in emissions; indeed, because natural gas generates less pollutants than coal, emissions will decrease.

Since use of natural gas will result in significant air quality benefits, General Motors requests that this permit modification be expeditiously approved. Should you have any questions regarding this request, please contact me or Ms. Diane M. Palmer at (216) 265-5390 or 5391.

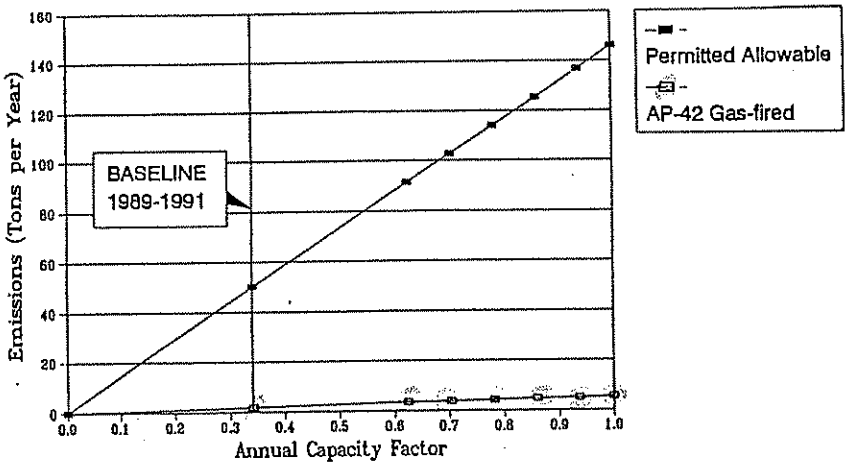
Sincerely,

Stephen P. Krupa

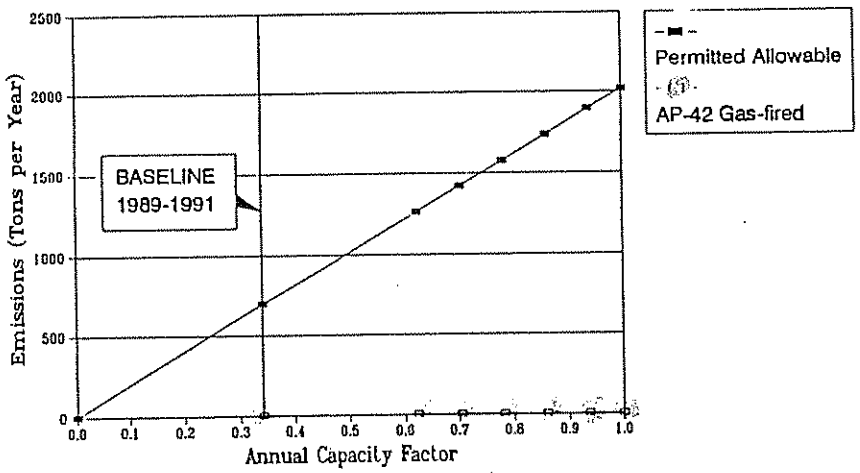
Stephen P. Krupa
Superintendent -
Environmental Activities

cc: R. Hodanbosi
D. M. Palmer

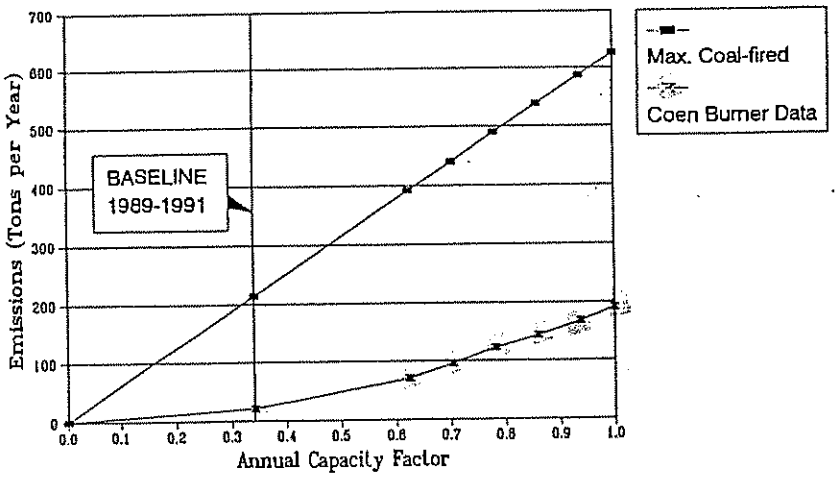
Particulate

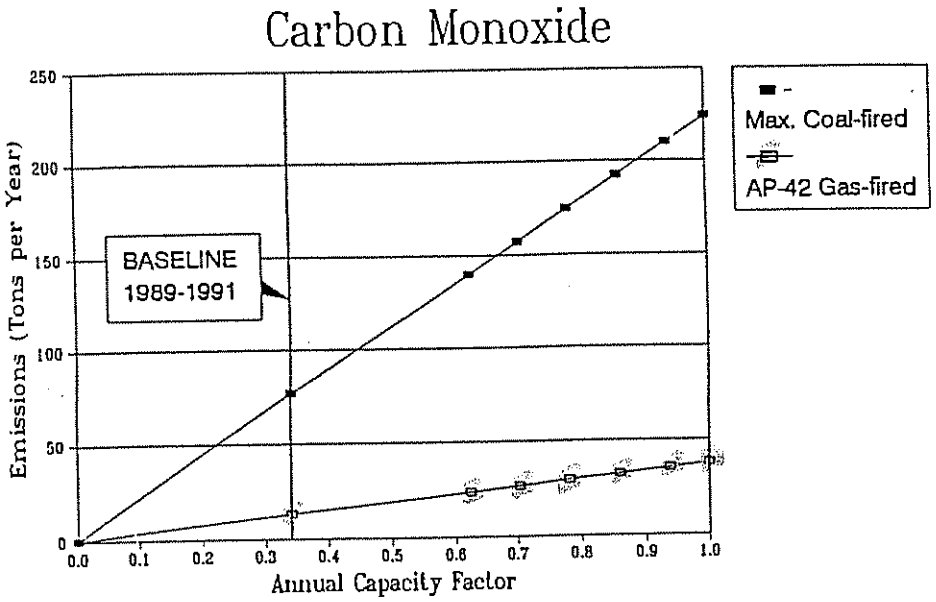


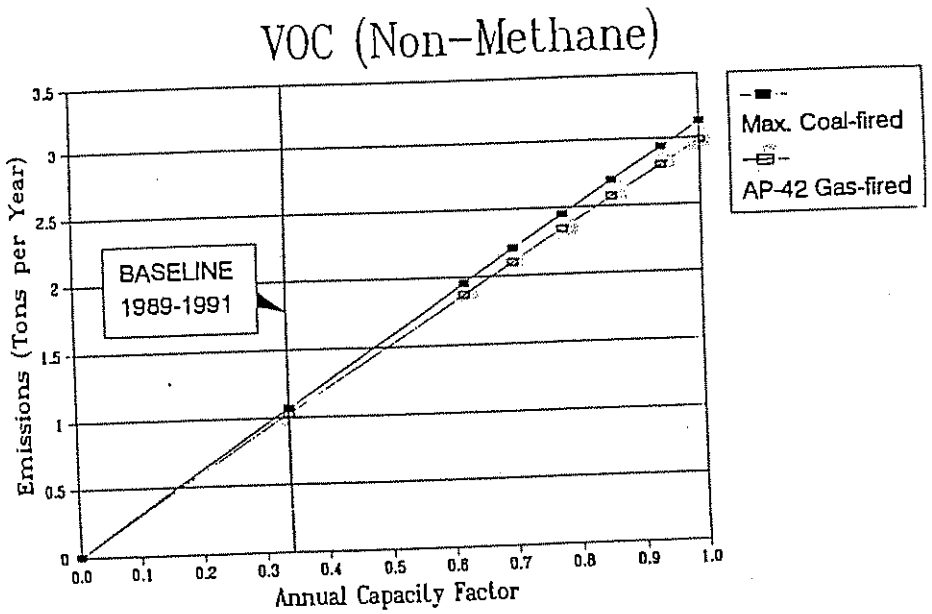
Sulfur Dioxide



Oxides of Nitrogen




Carbon Monoxide
Emissions (Tons per Year)
250
200
150
100
50
0
BASELINE
1989-1991
Max. Coal-fired
AP-42 Gas-fired
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
Annual Capacity Factor


VOC (Non-Methane)
Emissions (Tons per Year)
3.5
3
2.5
2
1.5
1
0.5
0
BASELINE
1989-1991
Max. Coal-fired
AP-42 Gas-fired
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
Annual Capacity Factor

INTER-OFFICE COMMUNICATION

OHIO EPA, DIVISION OF AIR POLLUTION CONTROL

To: District Offices and Local Air Agencies; Barb Bonds, Chief, DSIWM

From: Robert Hodanbosi, Chief, DAPC

Re: Air Pollution Permit Requirements for Composting Facilities.

Date: April 22, 1993

This memo is intended to clarify the air pollution permitting requirements for composting facilities. First, a little background information is helpful.

In June, 1992, new solid waste composting regulations became effective. These regulations created 3 classes of composting facilities. These classes include:

Class I - Facilities which accept municipal solid waste. They must obtain a solid waste permit and annual solid waste license.

Class II - Facilities which accept source separated yard waste or animal waste plus bulking agents only and are over 15,000 square yards in size. Other materials can be composted if approved by the Director. Solid waste registration and a solid waste operating license are required.

Class III - Facilities which accept source separated yard waste or animal waste plus bulking agents only and are less than 15,000 square yards in size. Solid waste registration is required. No solid waste permits/licenses are needed.

On November 9, 1992, the Director of the Ohio EPA meet with the Ohio Municipal League and various city and village officials regarding yard waste composting facilities. The city and village officials expressed strong concerns that requiring these facilities to apply for and obtain both a Permit to Install (PTI) and Permit to Operate (PTO) were unnecessary and burdensome. After listening to their concerns, he stated that DAPC would not require air permits for yard waste composting facilities.

In a press release on November 9, 1992, the Director announced a moratorium on enforcement of the compost rules for Class II and Class III composting facilities (solid waste compost rules). The press release also stated that Ohio EPA proposed a method to simplify composting requirements for yard waste. This proposal would require facilities that compost only yard waste to simply register with Ohio EPA and notify Ohio EPA if the ownership transfers or when they close. In addition, they would not be required to employ certified operators or meet the siting criteria required for facilities that compost other types of waste, such as animal waste.

INTER-OFFICE COMMUNICATION

OHIO EPA, DIVISION OF AIR POLLUTION CONTROL

It is the Director's desire to minimize the regulatory burden on composting facilities as much as possible. As such, the air requirements will be as follows:

Class I Composting Facilities

Class I composting facilities will be required to apply for and obtain both PTIs and PTOs for all air pollution sources at the facility. This includes the material storage piles, paved and unpaved roadways, gasoline dispensing facilities, heaters/boilers, storage tanks greater than 500 gallons in size and other typical air pollution sources. The normal PTO registration program will be available for small air pollution sources.

Class II and III Composting Facilities

Class II and III composting facilities that compost only yard waste will not be required to apply for and obtain air pollution permits provided that these facilities meet two criteria: (1) Best Available Technology (BAT) requirements for the composting piles, roadways and parking lots associated with these facilities, and (2) no odor or dust complaints have been received. The BAT limits for composting piles are no visible particulate emissions except for a period of time not to exceed one minute during any sixty-minute observation period. For paved roadways and parking areas, there are no visible particulate emissions except for a period of time not to exceed one minute during any sixty-minute observation period. For unpaved roadways and parking areas, there are no visible particulate emissions except for a period of time not to exceed three minute during any sixty-minute observation period.

If these facilities have other types of sources (gasoline dispensing, organic material storage tanks, heaters etc. then they must apply for and obtain permits for these sources.

If you receive non-air permitting questions concerning what type of operational requirements are being required of these types of facilities, then please direct these questions to DSIWM. If you have any air related questions or comments concerning this policy, please contact Mike Hopkins, at 614-771-7505.

RH/MH

cc: Jim Orlemann, DAPC
Clara Dailey, DAPC
Jim Braun, DAPC
Misty Parsons, DAPC
Alan Lloyd, DAPC

OhioEPA
State of Ohio Environmental Protection Agency

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INTEROFFICE COMMUNICATION

Don Schregardus

To: Bob Hodanbosi, Chief, DAPC

From: Vaughn Laughlin, Chief, GIR

Subject: End of Air Permit Moratorium for CDD Facilities

Date: June 14, 1996

This memo is to confirm that the construction and demolition debris rules "are in place." Effective immediately, the Director has ended the moratorium on the issuance of air pollution control permits for fugitive dust for construction and demolition debris facilities.

Please commence normal processing of the following PTI applications which were on hold because of the moratorium:

PTI #	Facility
02-6390	Ashtabula Recycling and Disposal
02-6422	Lake County C&D Disposal Facility
07-327	Scarberry and Son Demolition, Inc.
14-3343	John R Jurgensen Company
15-799	East 30 Excavating Co.
17-1340	Kuchan Farm.

VL/BB/bks

cc Jenny Tiell, Deputy Director, Programs
Barb Brdicka, Chief, DSIWM
Pat Madigan, Chief, PIC
Mike Hopkins, DAPC
Laura Ephlin, Legal
Julianne Kurdila, Legal

OEPA inter-office communication

to: Distribution date: April 22, 1994

from: Mike Hopkins, Section Manager - AQM&P

subject: PCE Dry Cleaning Source PTIs

As you know, the federal NESHAP for PCE dry cleaner's has been finalized. A copy of the MACT package was sent to all field offices in November 1993. This package contained a summary of the requirements and a copy of the Federal Register notice. Additional special terms and conditions for these sources have been developed for your use. A copy of these conditions was recently sent to all field offices. If you believe that any other conditions are needed, please forward them to Safaa El-Oraby for consideration. A revised version will be distributed if changes are made.

In addition, in this IOC we would like to stress several important things to consider when determining what is applicable to a particular source, and what to include in the PTI.

These three items should be included somewhere in the PTI worksheet paperwork sent to Central Office so that we are aware of them when conducting our review. They determine what control is required and if the source meets the NESHAP and BAT. The items are:

- when the machine was installed (complete date)
- type of machine (dry to dry or transfer - this should be part of the equipment description)
- amount of PCE to be purchased/used yearly (past 12 rolling months)

There are also record keeping, reporting and operational requirements. The federal rule, 40 CFR 63 Subpart M, should be cited in PTI's under the applicable rules. OAC 3745-21-09 (AA) should also still be cited.

If the amount of planned use (and purchase) is less than the potential usage/emissions, a simple restriction on gallons (gal/year or gal/month, for example) should be included in the PTI. This is important because actual amount purchased will determine what category they belong in and the control equipment required, if any.

It has been decided that we will not normally issue these PTIs as drafts. Please be aware of the new requirements as you are reviewing and writing PTIs. If you have any questions, please contact the new source review staff or Safaa, Toxics - MACT Standards, at Central Office.

Thank you.

Distribution

Don Cavote, CDO
Judy Zimomra, Cleveland
Doug Seaman, Cleveland
Fred Klingelhafer, SEDO
Jerry Garro, Akron
Phil Henrichs, SWDO
John Paul, RAPCA
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Barry Burton, Cincinnati
Don Walden, Portsmouth
Don Moline, Toledo
Gerry Rich, NWDO
Jim Braun, AQM&P
Misty Parsons, AQM&P

MH/SE/MP

AQM&P Section
PTI Exemptions Covering Small Fuel Fired Units
Are Generators Included?

We recently received an inquiry concerning whether generators, engines used to produce electrical power, are covered under the OAC 3745-21-03 (A)(1)(a) exemption for fossil fuel fired units less than 10 mmBTU/hr in size. When rule 03 was revised last year, this exemption was changed to include more sources, and the similar exemptions (b) and (c) were added.

Exemption (b) covers the same types of units that are less than 1 mmBTU/hr in size, but they can burn a wider range of fuels and still be exempted.

New (c) exempts furnaces and dryers whose only emissions are water and the products of combustion of the fuel, therefore excluding many industrial process, like burn off ovens, from this exemption (i.e. they need PTIs).

Generators are not listed specifically in these exemptions, therefore, it is the Division's position that they are <u>not</u> exempt from the PTI requirement, no matter how small. However, it is possible that some of them, by their potential emissions, would be De Minimis sources under OAC 3745-15-05. Those that are De Minimis would not need PTIs, and do not have to meet other rule requirements as well.

Please keep this in mind when you are considering permitting for these sources, or when you receive inquires about our requirements. If any of the District or Local staff have questions about exemptions, please contact one of the Central Office PTI review staff. Thank you.

O: LTR ONLY
CC:

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

RECEIVED
OCT - 2 1995
OFFICE OF GENERAL COUNSEL

MAR 29 1996

SEP 27 1995

Loretta King
Deputy Assistant Attorney General
Civil Rights Division
U.S. Department of Justice
P.O. Box 65808
Washington, D.C. 20035-5968

Re: NAACP-Flint Chapter v. Engler, Case No. 95-CV-73224-DT
(E.D. Mich.)(Zatkoff, J.)

Dear Ms. King:

By letter dated September 18, 1995 (copy enclosed), EPA requested that the Department of Justice petition the court for permission to file an amicus curiae brief on behalf of EPA in the above-referenced case. As requested by your staff, we have prepared the enclosed preliminary analysis of Title VI as it applies in the Prevention of Significant Deterioration of Air Quality (PSD) permitting program under the Clean Air Act (CAA). We have just recently received copies of the papers that have been filed in the case and have forwarded copies to your office. Because this case raises fundamental issues of first impression regarding the application of Title VI to EPA-funded State-implemented environmental programs, EPA believes it is important for the United States to file an amicus brief in this case.

As you may know, Plaintiffs allege that the Michigan Department of Natural Resources (MDNR) violated Title VI and EPA's implementing regulations by granting the PSD permit for the Genesee Power woodwaste combustor. They seek declaratory and injunctive relief for violations of Title VI due to the alleged failure to consider racially discriminatory impacts and adverse health effects from operation of the woodwaste combustor. Plaintiffs' argument relies in part on a December 23, 1994 letter from Dan Rondeau, EPA's Director of Civil Rights, which states that "the fact that the recipient does not select the site in a permit application does not relieve the recipient of the responsibility of ensuring that its actions in issuing permits

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for such facilities do not have discriminatory effect." (copy enclosed). In its response to the Plaintiffs' preliminary injunction motion, MDNR has denied that Title VI provides any basis for relief.

In this instance, the State issued a Federal permit under a delegation to it of the PSD program. While Title VI is inapplicable to a Federal agency's action in issuing a permit, where a State agency receives Federal funds and conducts a permitting program, Title VI applies to the State agency's action of issuing permits, regardless of whether the permitting program was delegated from EPA or not. It is EPA's position that the Title VI obligations of recipients of EPA financial assistance apply to MDNR's implementation of the CAA PSD permitting program and that those obligations impose certain affirmative duties, as outlined below.

EPA is still deliberating about the position it supports regarding Title VI and permitting programs under the environmental statutes, especially where, as is the case in other statutes, there may not be as much opportunity as under the CAA to incorporate Title VI considerations in State permitting programs. This is a complex policy and legal issue which we and the Department of Justice will want to evaluate carefully. Since the United States may want to argue a more expansive interpretation of Title VI obligations in the future than that advanced in the attached memorandum, we ask that the current brief be drafted in such a way that preserves the ability to do so.

In addition, EPA would like to discuss with you the issue of addressing an appropriate remedy in this case, should the court find that Title VI has been violated. For a variety of reasons, our preliminary position is that the equities in this case probably do not support revocation of the permit. Among those considerations is the fact that additional evidence was produced by the Plaintiffs after the permit was issued. Further, certain allegations relating to environmental justice were presented to EPA during the EPA Environmental Appeals Board's (EAB) review of the 1993 initial permit. The EAB rejected the environmental justice claims for failure to prove intentional discrimination and EPA declined to take further action to halt issuance of the permit at that time. Therefore, unless more fundamental issues regarding the permitting process are presented than we have received to date, EPA would support a suggestion to the court that some form of prospective relief be fashioned for operation of MDNR's PSD program and/or for the woodwaste plan at this site.

If you have any questions regarding this matter, please contact either Mary O'Lone (260-1487) or Tony Guadagno (260-1137) of my staff.

Sincerely,

Jonathan Z. Cannon

Enclosures

cc: Mary D. Nichols
Steven A. Herman
Dan J. Rondeau
Valdas V. Adamkus
Lois J. Schiffer
Poli Marmolejos
Cathy M. Sheafor

NSR Manual Book 1 - Original Scan 11/2006
Page 181

Proposed Content of Federal Government's Amicus Curiae Brief

BACKGROUND

I. The Clean Air Act.

The Prevention of Significant Deterioration of Air Quality (PSD) program of part C of title I of the Clean Air Act (CAA) is a preconstruction review and permitting program applicable to new and modified major stationary sources of air pollution. The purpose of the PSD program is "to protect and enhance the quality of the Nation's air resources so as to promote the public health and welfare and the productive capacity of its population." CAA § 101(b)(1).

The PSD program is a combination of air quality planning and air pollution control technology requirements. In brief, pursuant to § 109 of the CAA, EPA has promulgated national ambient air quality standards (NAAQS) to protect the public health and welfare. Based on these standards, in accordance with section 110(a) of the CAA, States must develop, adopt, and submit to the EPA for approval State implementation plans (SIPs) which contain emission limitations and other control measures to attain and maintain the NAAQS and to meet the other requirements of section 110(a). Each SIP is specifically required to contain a PSD permitting program. CAA § 110(a)(2)(C).

The Clean Air Act Amendments of 1977 established the statutory PSD requirements in part C of title I of the CAA. Part C included provisions to limit deterioration of air quality by establishing maximum permissible increases of air pollution over baseline concentrations, or "increments," and by requiring preconstruction review and permitting of new and modified major stationary sources. In brief, the statutory prerequisites for the issuance of a PSD permit include: 1) air quality impact analysis demonstrating that air quality standards and other requirements will be met, 2) implementation of best available control technology (BACT), 3) consideration of potential impacts on the National Parks, Wilderness Areas, and other areas specified in section 162(a) of the CAA, 4) analysis of air quality impacts projected as a result of growth associated with the project, 5) commitment to an air quality monitoring program, and 6) a public hearing with opportunity for EPA and the public to present their views on the project. See generally CAA § 165.

EPA currently has two sets of PSD regulations implementing the PSD program: (1) 40 C.F.R. § 51.166 specifies the minimum requirements for a PSD SIP to receive EPA approval, and (2) 40 C.F.R. § 52.21 provides for Federal implementation of PSD requirements, including the ability of EPA to delegate the Federal program to States. [Subsequent revisions to the PSD

regulations are not pertinent to this case.] Pursuant to 40 C.F.R. § 52.21(u), EPA has delegated its authority for conducting PSD review and permitting to a number of states, such as Michigan, which have not adopted their own PSD SIP programs. Pursuant to 40 C.F.R. § 52.21(r)(2), the procedures for public participation and administrative appeals concerning such PSD permits are provided at 40 C.F.R. Part 124.

EPA's Environmental Appeals Board (EAB) reviews and decides administrative appeals of EPA permit decisions (including EPA permit decisions delegated to States). Any person, as well as an EPA Region when EPA has delegated its permitting authority to a State, may appeal an initial EPA or delegated State permit decision to the EAB. As discussed below, an appeal of the PSD permit for the Genesee facility was filed with and decided by the EAB.

II. Title VI of the Civil Rights Act.

Title VI of the Civil Rights Act of 1964 prohibits discrimination on the basis of race, color, or national origin under Federally-assisted programs or activities. It expressly provides that:

> No person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance.

42 U.S.C. § 2000d. In addition to barring intentional discrimination, the Supreme Court has ruled that Title VI authorizes agencies to adopt implementing regulations that also prohibit discriminatory effects. Guardian Ass'n v. Civil Serv. Comm'n of New York, 436 U.S. 582 (1983). EPA's regulations implementing Title VI adopt a discriminatory effects standard and contain both general and specific prohibitions. See 40 C.F.R. §§ 7.30 and 7.35. In particular, they expressly provide that:

> A recipient shall not use criteria or methods of administering its programs which have the effect of subjecting individuals to discrimination because of their race, color, [or] national origin . . . or have the effect of defeating or substantially impairing accomplishment of the objectives of the program with respect to individuals of a particular race, color, [or] national origin. . .

40 C.F.R. § 7.35(b)(emphasis added).

EPA's Title VI regulations define a "[r]ecipient" as "any state or its political subdivision, any instrumentality of a

state or its political subdivision, . . . to which Federal financial assistance is extended directly or through another recipient." 40 C.F.R. § 7.25. As a condition of receiving EPA financial assistance to implement environmental programs, State agencies provide assurances for complying with Title VI and EPA's implementing regulations, which are incorporated by reference into financial assistance agreements. 40 C.F.R. § 7.80.

EPA's Office of Civil Rights (OCR) is charged with EPA's Title VI enforcement and compliance functions. 40 C.F.R. § 1.25(b). Under its Title VI regulations, EPA has established processes for reviewing administrative complaints and for conducting compliance reviews of EPA-funded State programs. In general, EPA monitors Title VI compliance through these processes rather than through a review of individual State-issued permits. The permit at issue in the current litigation is the subject of a Title VI administrative complaint filed by another party and is currently under investigation by OCR.

DISCUSSION

A State agency that receives EPA financial assistance to administer an EPA-delegated PSD program is subject to the requirements of Title VI and EPA's implementing regulations. See 40 C.F.R §§ 7.15, 7.30, and 7.35.[1] Its Title VI obligations include, but are not limited to, ensuring nondiscrimination in the permit review and public participation processes. 40 C.F.R. §§ 7.30 and 7.35(a). Under EPA's Title VI regulations the recipient also is required to ensure that its policies, practices, actions, and decisions do not have the purpose or effect of discriminating based on race, color, or national origin. 40 C.F.R. § 7.35(b).[2] This means the recipient must ENSURE that

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[1] The Government is only expressing its views on Title VI in the context of State PSD permitting actions, and its positions expressed herein do not necessarily apply to other permitting programs, including other air permitting programs.

[2] In this case, the key provision in EPA's regulations is 40 C.F.R. § 7.35(b), which prohibits discriminatory effects of activities authorized under permits issued under the PSD program. EPA's Title VI regulations also prohibit the discriminatory effects of actual siting decisions made by recipients. 40 C.F.R. § 7.35(c). In the permitting context, this provision would apply where the recipient selects the site, or arguably where the recipient has the authority to make permitting decisions based on siting considerations.

ensure that: (1) there is no intentional discrimination under its PSD program[3] and (2) the activities authorized by the PSD permits it issues do not result in discriminatory effects prohibited by Title VI and EPA's implementing regulations, at least to the extent it can do so without violating any prohibition or limitation under the CAA.[4] With regard to prohibited discriminatory effects, the recipients must exercise all discretion available, consistent with the CAA, to ensure that there are no such effects as a result of the PSD permits it issues.[5]

The CAA provides plenary authority to PSD permitting agencies to consider and address evidence of disparate impacts prohibited by Title VI where the disparate impact is related to the CAA's requirements. The PSD provisions of the CAA call for a comprehensive preconstruction review of a proposed new or modified stationary source. A significant legislative purpose of the PSD provisions is to

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[3] Plaintiffs do not allege, although do not concede a lack of, intentional discrimination in the current litigation. However, we note that EPA's EAB reviewed an earlier version of the PSD permit in question and remanded the permit to the State for further proceedings on October 22, 1993. One of the grounds of appeal was that issuance of the PSD permit constituted "environmental racism." Based on the allegations and the record before it at the time, the EAB held that the appellants had not offered evidence sufficient to prove their claims of intentional discrimination. The permit at issue in the current litigation was issued by the State in December 1993 following remand by the EAB.

[4] Under current Title VI case law, a complainant makes a *prima facie* case by showing that the alleged act has a significant adverse disparate impact on an identifiable population defined by race, color, or national origin. However, this showing alone is not sufficient to establish a violation of Title VI. Once a *prima facie* case is made, the recipient is afforded an opportunity to show that there is no disparate impact, or to provide a legitimate nondiscriminatory reason for its action. The complainant may refute the recipient's defense by showing that the justification is a pretext or that a less discriminatory alternative is available. The recipient may rebut this by showing that the alternative does not meet its legitimate objectives.

[5] Implicit in the duty to ensure no discriminatory effects is a duty to analyze or consider the disparate effects on populations defined by race, color, or national origin.

> assure that any decision to permit increased air pollution in any area to which this section applies is made only after careful evaluation of all the consequences of such a decision.

CAA § 160(5).

Specifically, the BACT[6] provisions of the PSD program in the CAA authorize the consideration of the "energy, environmental and economic impacts" of the proposed new or modified major stationary source. CAA § 165(a)(4). The legislative history demonstrates that Congress intended the overall impact of the source on the character of the community to be factored into the BACT components of the PSD permitting decision, authorizing the State to condition or to deny the permit based on these considerations:

> [W]hen an analysis of energy, economics, or environmental considerations indicates that the impact of a major facility could alter the character of that community, then the State could, after considering those impacts, reject the application or condition it within the desires of the State or local community.

S. Rep. No. 127, 95th Cong., 1st Sess. 31 (1977) reprinted in Senate Comm. on the Environment and Public Works, 95th Cong., 2d Sess., A Legislative History of the Clean Air Act Amendments of 1977, vol. 3 at 1405 (1978) (hereafter 3 1977 Legislative History).

Further, the provisions regarding the maximum allowable increases in air pollution ("increments") for areas subject to PSD, CAA section 163 and 165(a)(3), enable a permitting authority to evaluate and to approve or reject the configuration of a proposed source based on its localized impacts. Congress recognized that States may decline to permit a source in a particular location as an increment management tool, even if the source would not violate the maximum allowable concentration. Under the PSD program, States may judge how much of the increment

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[6] BACT is defined as "an emission limitation based on the maximum degree of reduction of each pollutant subject to regulation under [the CAA] emitted from or which results from any major emitting facility, which the permitting authority, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such facility through the application of production processes and available methods, systems, and techniques, including fuel cleaning, clean fuels, or treatment or innovative fuel combustion techniques for control of each such pollutant." CAA § 169(3).

"will be devoted to any major emitting facility" and whether it should "refuse to permit construction, or limit its size." 3 1977 Legislative History at 1405 (Senate Report).

In consideration of the need to preserve limited clean air resources while providing opportunities for future economic growth, see CAA § 160(3), a State may decline to issue a PSD permit for a source at the proposed site in order to retain a portion of the growth increment. See generally 3 1977 Legislative History at 1405 (Senate Report). The permitting authority may reasonably conclude that a proposed source that would use most or all of the available increments in a given area but would not violate maximum permissible concentrations should nevertheless not be permitted in the applicant's desired configuration. Such a decision may avoid the need to "ratchet down" on existing sources in the future, which might require an economically wasteful and politically difficult decision to retrofit pollution controls on the source now being permitted in order to accommodate future economic growth. This reasoning also extends to more generalized air quality concerns regarding the projected impacts of a proposed plant in a particular location.

An important aspect of PSD review is a public hearing, the scope of which is defined broadly to include:

> opportunity for interested persons including representatives of the Administrator to appear and submit written or oral presentations on the air quality impact of such source, alternatives thereto, control technology requirements, and other appropriate considerations.

CAA § 165(a)(2). Thus, in addition to an assessment of the specific air quality impacts of the proposed source, the statute plainly provides an opportunity for consideration of alternatives to the proposed source and other appropriate considerations. This authority to consider alternatives necessarily includes authority to consider whether other locations would be preferable to the location proposed by the source if the permitting authority decides to do so based upon consideration of appropriate information, including community views concerning the proposed project.

In this case, the specific allegations that MDNR has violated Title VI in the issuance of the Genesee permit are also pending before EPA's OCR which has not completed its investigation under 40 C.F.R. Part 7. It is possible that the administrative process will be rendered moot by this judicial proceeding and/or that the issues will be subject to res judicata or collateral estoppel. In any event, EPA is not in a position to opine on the merits of the claim at this time and seeks to participate as amicus solely to help define the United States'

view of what duties Title VI imposes on a recipient of EPA assistance in this context.

S/L Directors, P/G, BC

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO IL 60604-3590

DEC 27 1994

MAR 21 1995

RA-19J

Russell J. Harding
Deputy Director
Michigan Department of Natural Resources
Stevens T. Mason Building
P.O. Box 30028
Lansing, Michigan 48909

Re: Genesee Power Station

Dear Mr. Harding:

Thank you for your August 15, 1994, response to the July 6, 1994, correspondence from Ms. Kary Moss, Executive Director of the Maurice and Jane Sugar Law Center for Economic and Social Justice. We want to address a matter in your correspondence related to the authority to consider the public's views about the site for a proposed major emitting facility under the Clean Air Act's Prevention of Significant Deterioration of Air Quality (PSD) program.

The PSD provisions call for preconstruction review of a proposed permit including consideration of the public's views about the air quality impacts of a source and "alternatives thereto." CAA § 165(a)(2), 42 U.S.C. § 7475(a)(2). The authority to consider the public's views on alternatives to a proposed source necessarily includes the authority to consider comments related to its proposed site. Consideration of public comments addressing siting issues is consonant with the stated purposes of the PSD program to carefully evaluate all the consequences of a decision to permit increased air pollution in an area and to provide adequate opportunities for informed public participation in the decision. CAA § 160(5), 42 U.S.C. § 7470(5). Hence, we believe the Clean Air Act provides authority to consider the public's views related to the proposed site for a major emitting facility including environmental justice concerns.

We recognize that siting issues may be particularly challenging and controversial. We will make every effort to work with you to ensure that PSD permits are the product of fair and reasoned decision-making and appropriately consider the concerns of permit applicants and the interested public. Please do not hesitate to contact us if you would like to discuss these issues further.

Finally, this letter does not address the claims under Title VI of the Civil Rights Act raised by the July 6, 1994, Sugar Law Center correspondence. The Title VI claims and a subsequent October 19, 1994, submittal from the Sugar Law Center are being reviewed by the United States Environmental Protection Agency's (USEPA's) Office of Civil Rights. Any questions you have about the matters related to Title VI of the Civil Rights Act should be directed to Rodney Cash, Acting Deputy Director of USEPA's Office of Civil Rights, or Mike Mattheisen, of his staff, at (202) 260-4575.

Sincerely yours,

/s/ original signed by
Valdas V. Adamkus

Valdas V. Adamkus
Regional Administrator

cc: Dennis Drake, Acting Director
Air Quality Division
Michigan Department of Natural Resources

Rodney Cash
Acting Deputy Director
USEPA, Office of Civil Rights

standard bcc's: official file copy w/attachment(s)
originator's file copy w/attachment(s)
originating organization reading file w/attachment(s)

other bcc's:
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A. Rowan, 19J
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R. Field, CM-29A
N. Zippay, CA-30A
C. Campbell, AT-18J
R. Miller, AT-18J
C. Newton, AR-18J
J. Clesceri, AE-17J
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J. Buzecky, AR-18J
V. Patton, OGC
M. Kataoka, OGC
M. O'Lone, OGC
M. Mattheisen, OCR

ORC:DAUGAVIETIS:ad:12/23/94 DISKETTE/FILE:GP-MDNR.EJ6

OhioEPA
State of Ohio Environmental Protection Agency

P.O. Box 163669, 1800 WaterMark Dr.
Columbus, Ohio 43216-3669
(614) 644-3020
FAX (614) 644-2329

George V. Voinovich
Governor

INTER OFFICE COMMUNICATION

DATE: April 21, 1995

TO: Distribution

FROM: Mike Hopkins, Manager-AQM&P

SUBJECT: Permit to Install Processing Table of Organization

Enclosed are tables of organization of personnel who process permit to install applications for the Districts and Local Air Agencies and personnel who either directly or indirectly process final permits to install for Central Office. These tables do not include personnel not involved in the permit to install process. The purpose of the document is to provide, in one location, the names, phone numbers, e-mail address and organizational structure of all personnel involved in the permit to install process.

Each of the tables contain the following information:

1. name
2. title
3. e-mail address
4. phone number

Those names in Bold print indicates that those people are responsible for reviewing either the final worksheet or permit.

Please note that the e-mail addresses are for internal use only. For e-mail from systems outside the Ohio EPA system the internet address should be used. For instance to send Alan Lloyd an e-mail message from NEDO you would use the dapc:alloyd address. To send Alan a message from outside the Ohio EPA system you would use INTERNET:"ALAN_LLOYD@CENTRAL.EPA.OHIO.GOV" as the address.

It is our understanding that the locals are working on their mail systems to allow e-mail through the recently installed high-speed data lines. Once this is accomplished we will update this document.

We hope this document will be useful to you. If you have any changes or suggestions to improve this document please contact Alan Lloyd at dapc:alloyd or (614) 644-3613.

MH/AL

Distribution: All DO/LAA Air Unit Supervisors
Bob Hodanbosi, DAPC
Jim Orlemann, DAPC
Tom Rigo, DAPC
Jeanne Mallett, Legal

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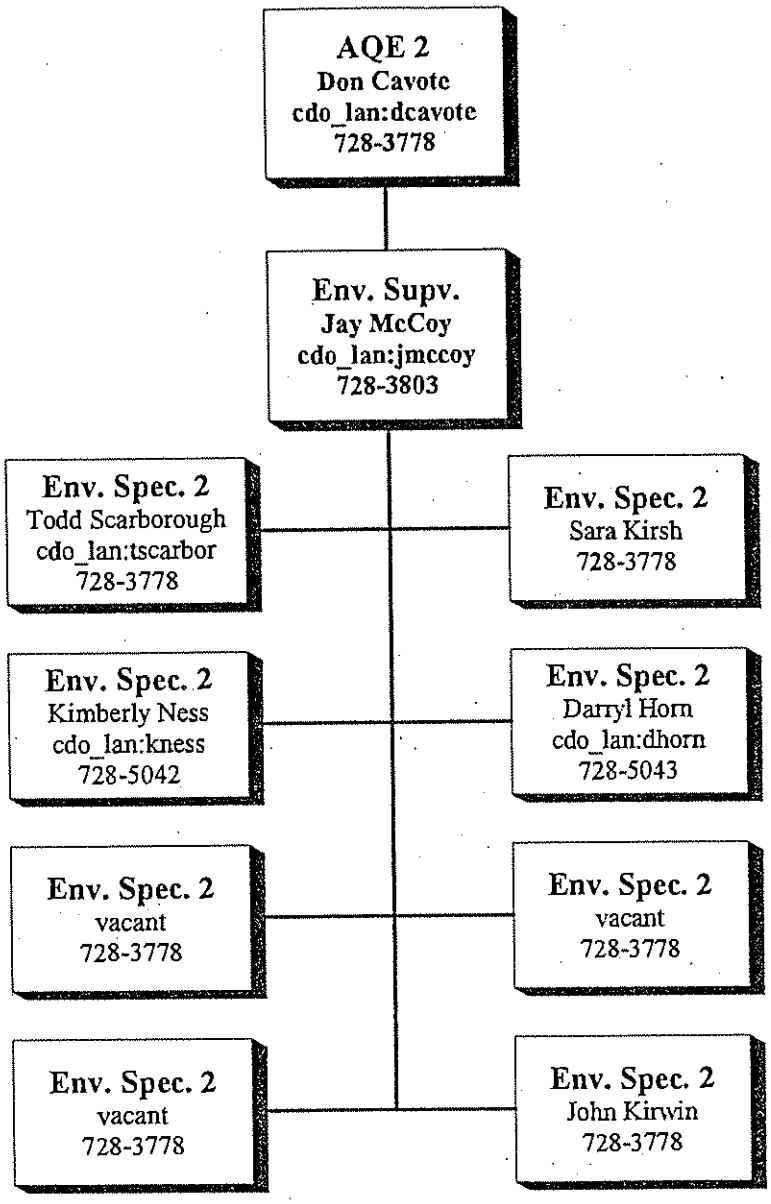
Central District Office
Permit to Install Processing



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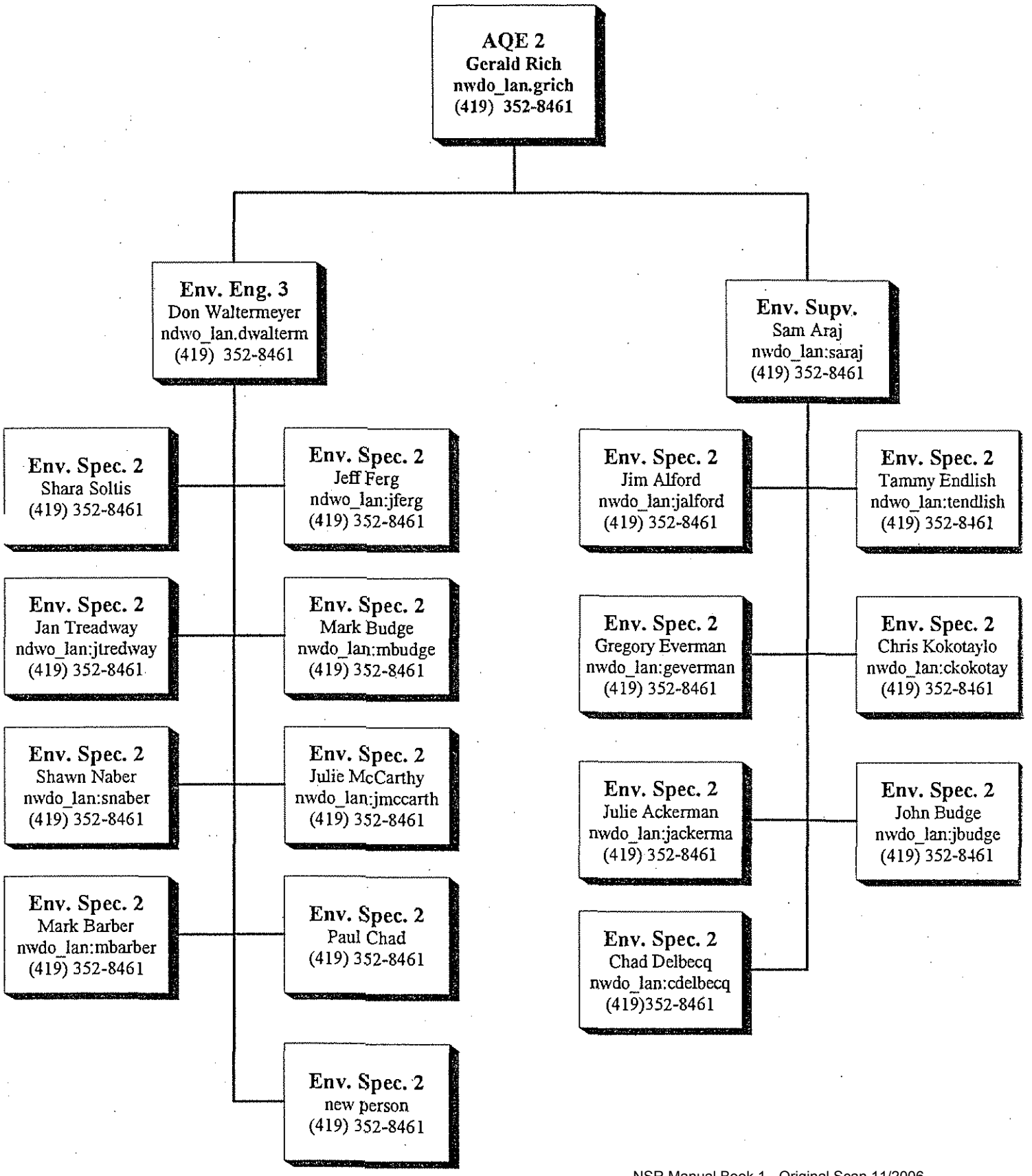

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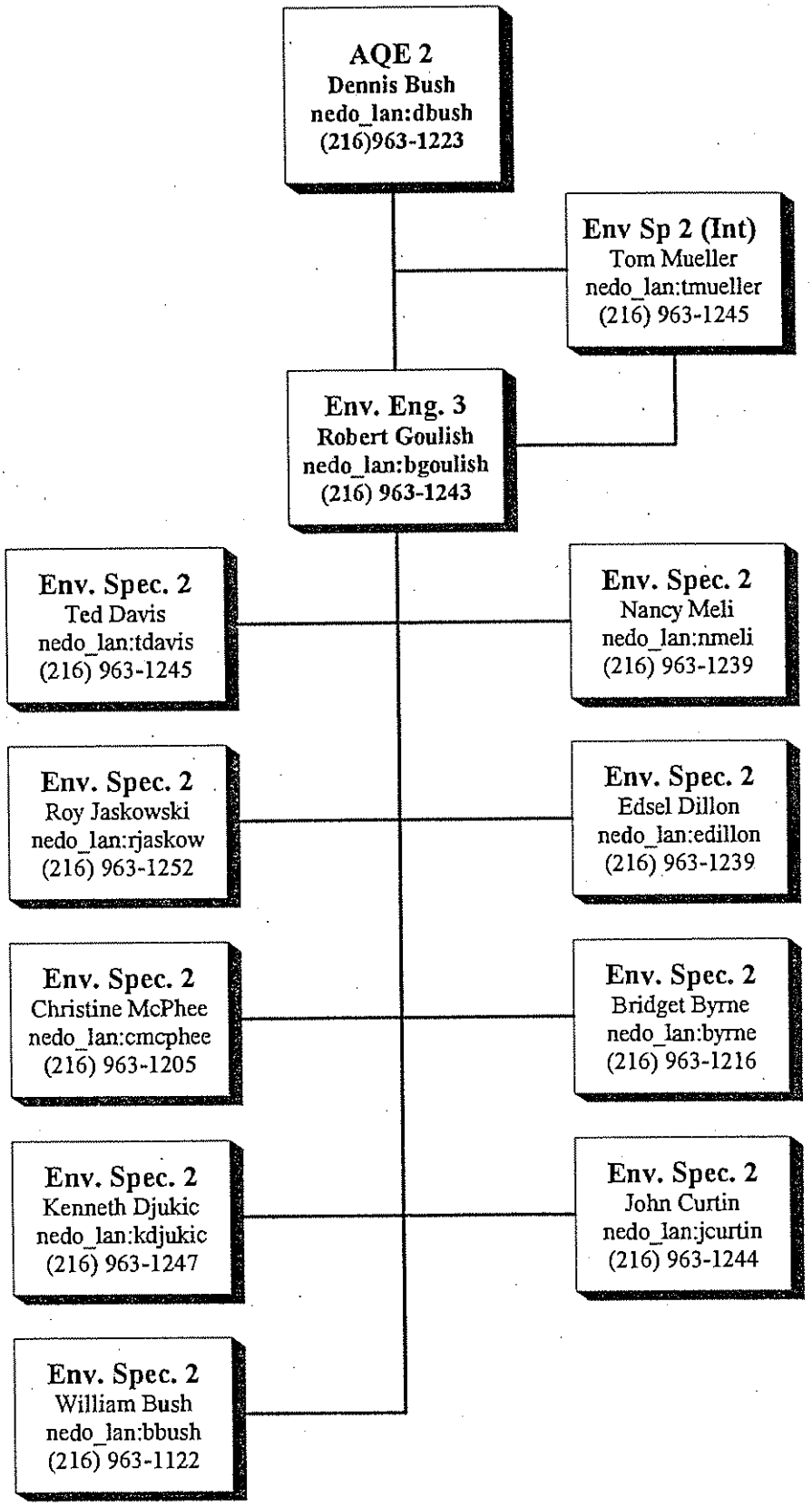

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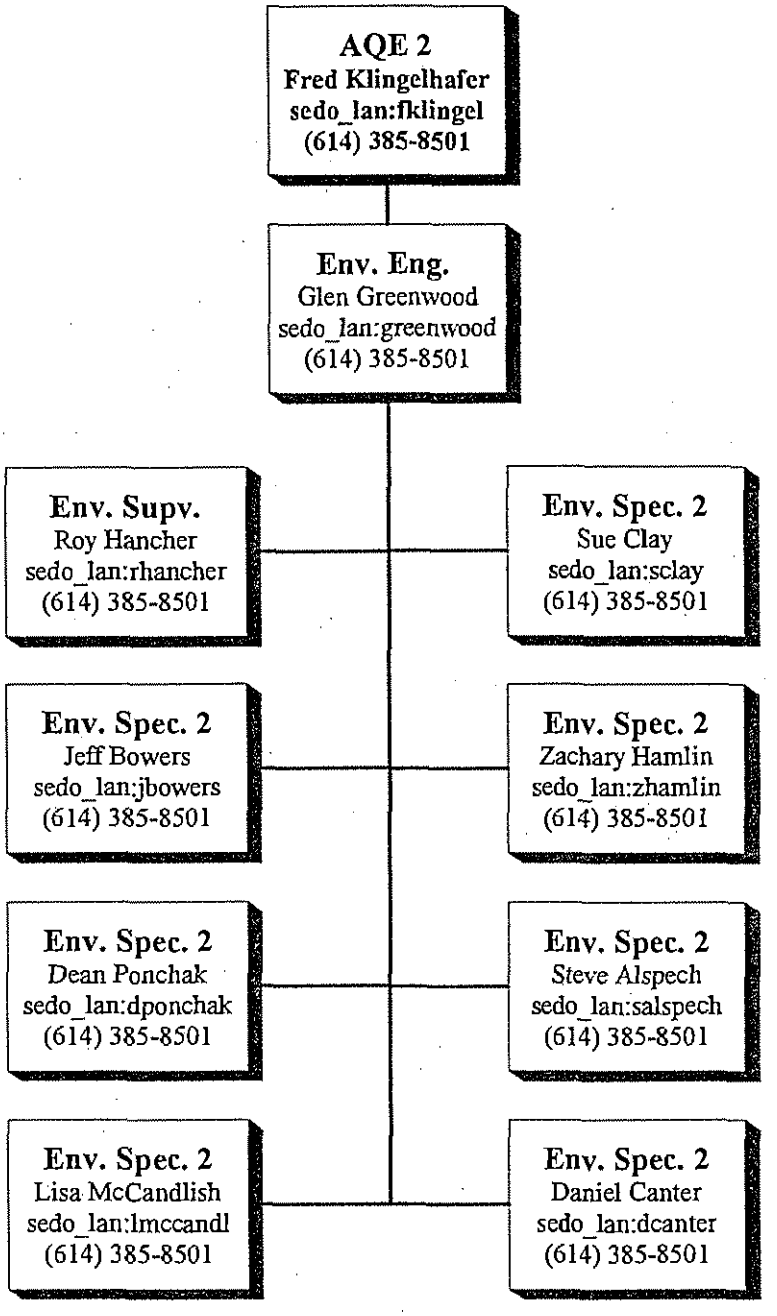

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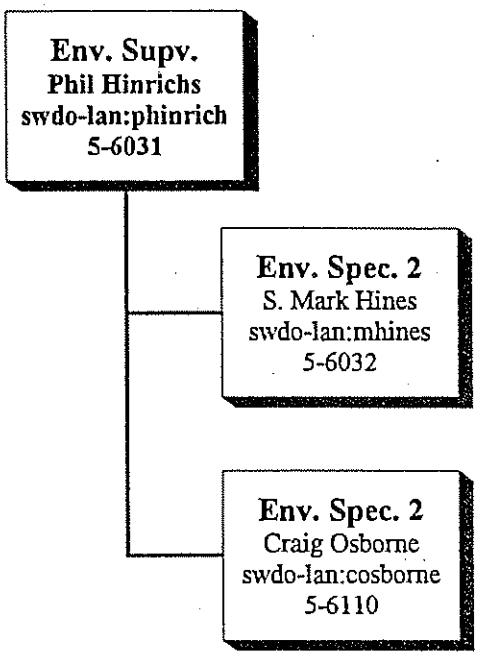

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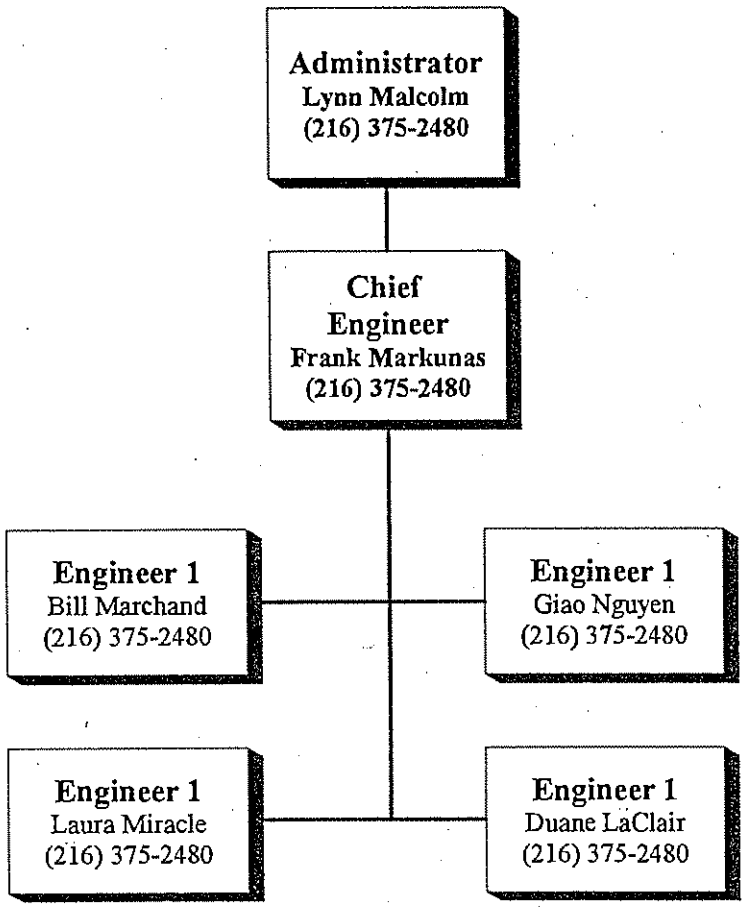

REGIONAL AIR POLLUTION CONTROL AGENCY
MONTGOMERY COUNTY HEALTH DEPT.
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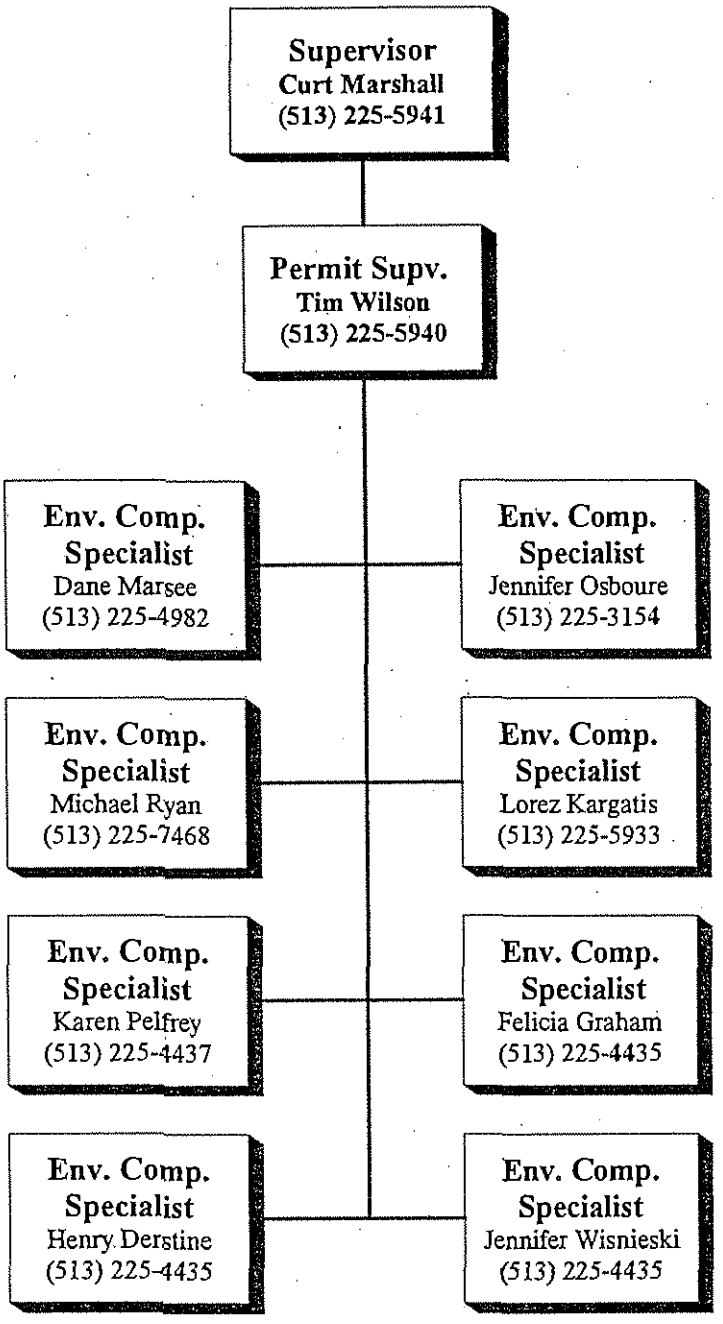

DEPARTMENT OF ENVIRONMENT SERVICE
AIR QUALTIY PROGRAM
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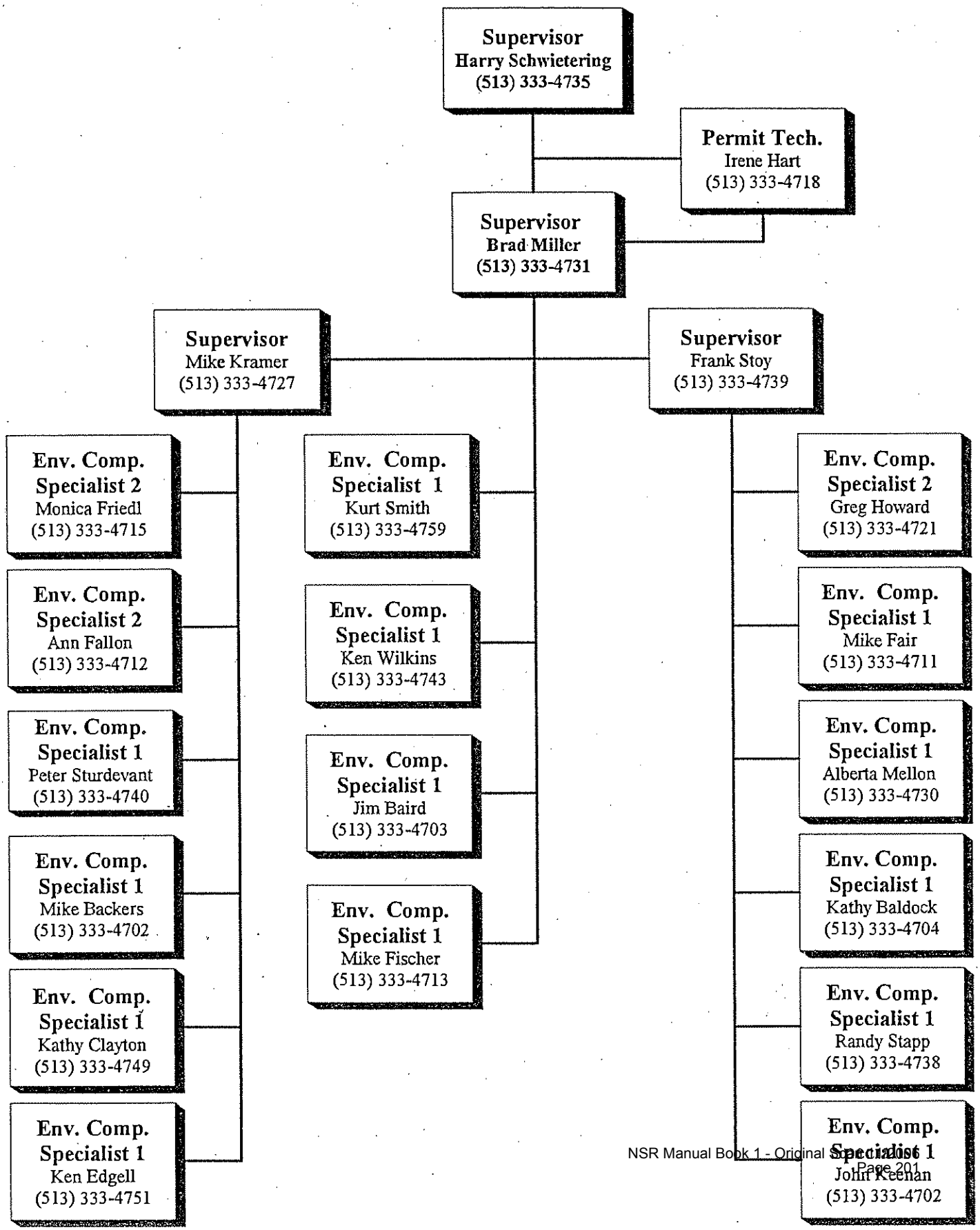

DIVISION OF THE ENVIRONMENT
DEPT. OF PUBLIC HEALTH & WELFARE
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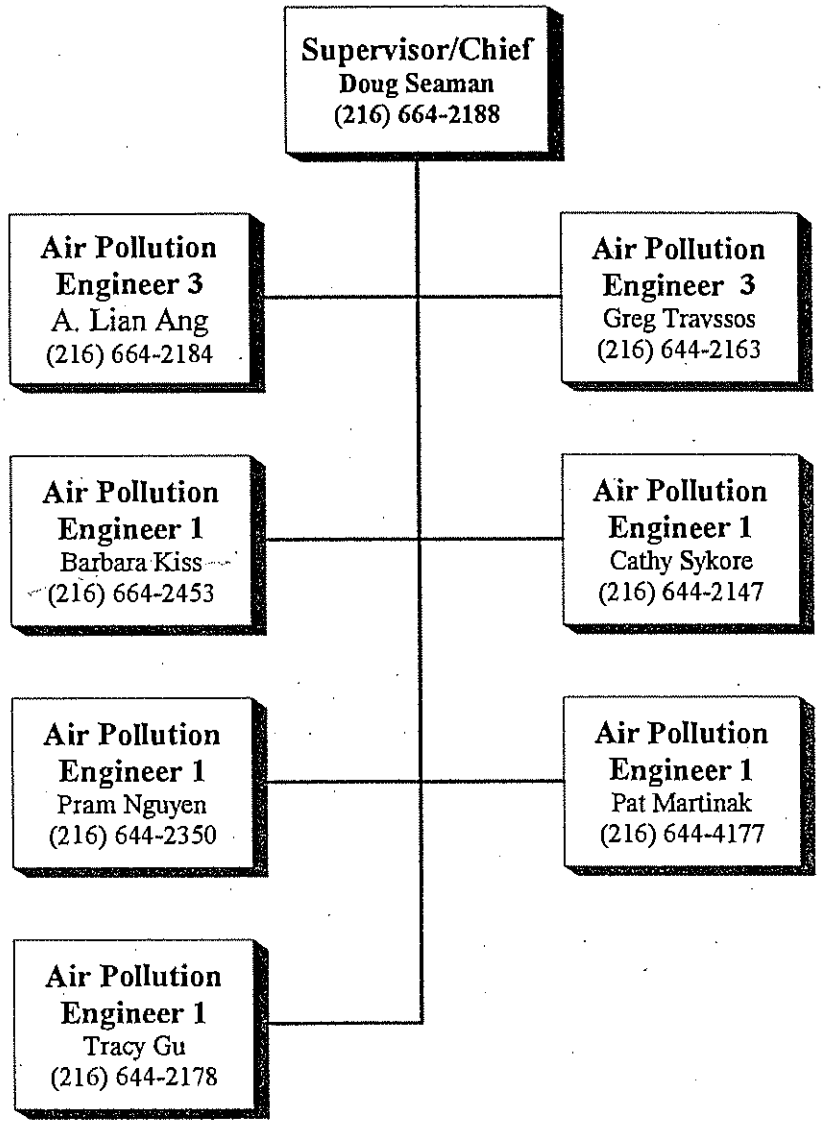

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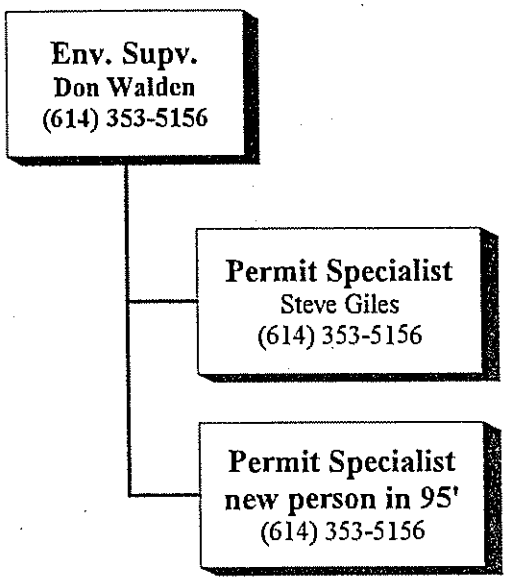
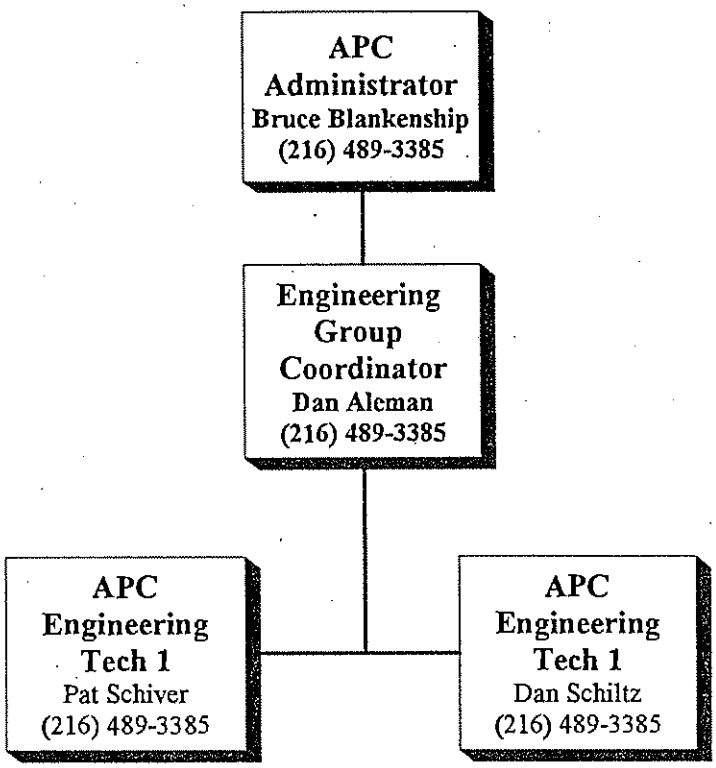


AIR POLLUTION CONTROL DIVISION
CANTON CITY HEALTH DEPT-CITY HALL
PERMIT TO INSTALL PROCESSING



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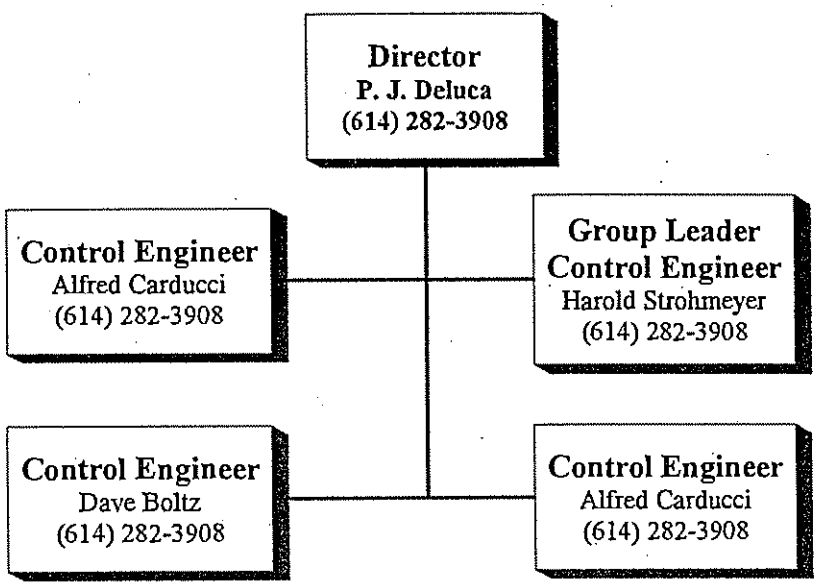
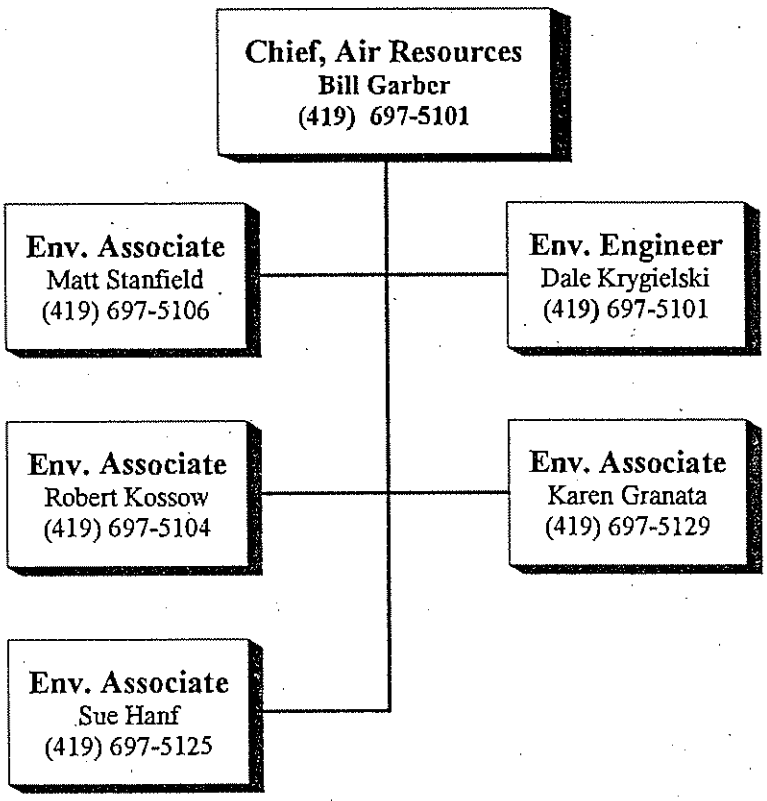
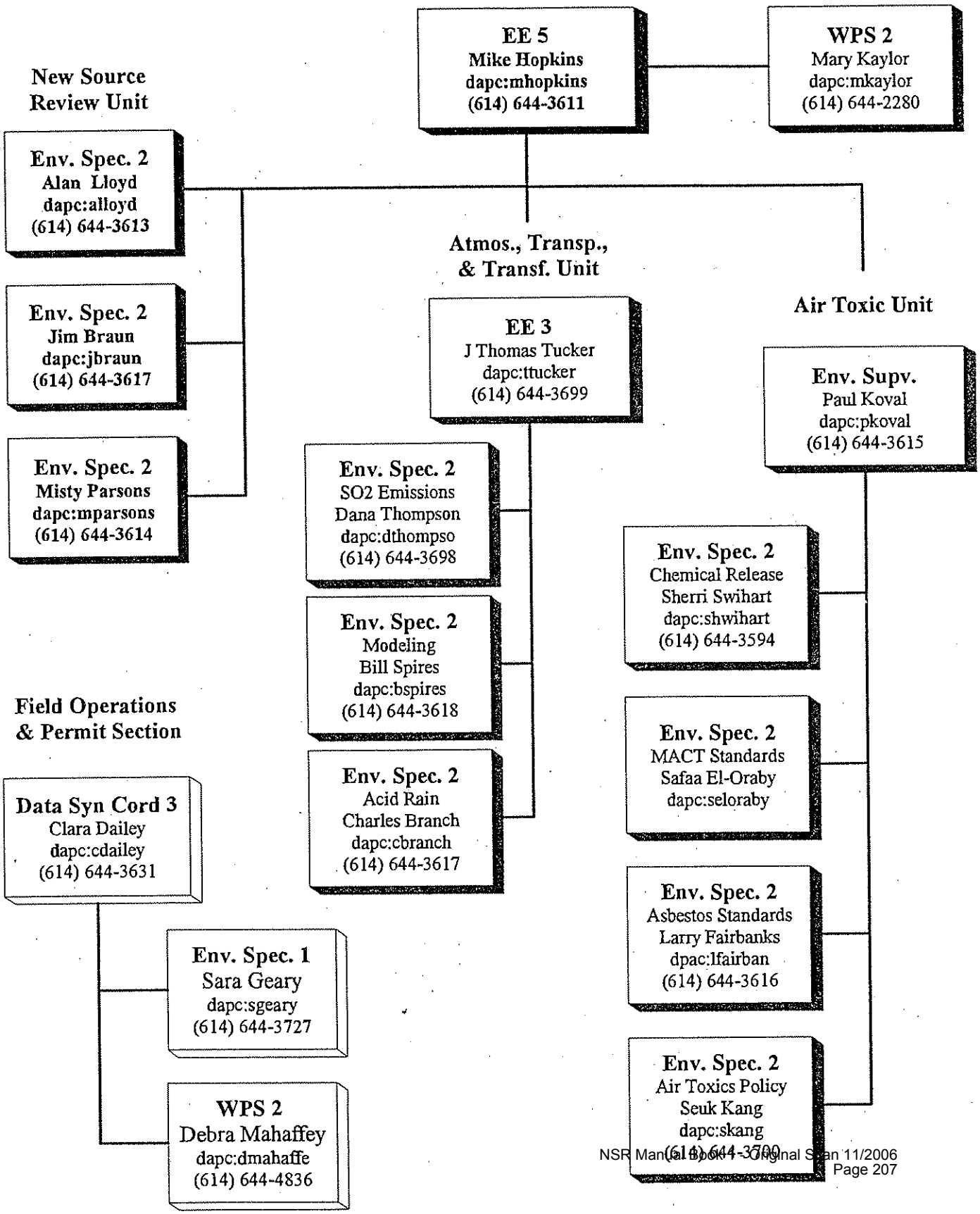


CITY OF TOLEDO
DIVISION OF
ENVIRONMENTAL SERVICES (DEC)
PERMIT TO INSTALL PROCESSING

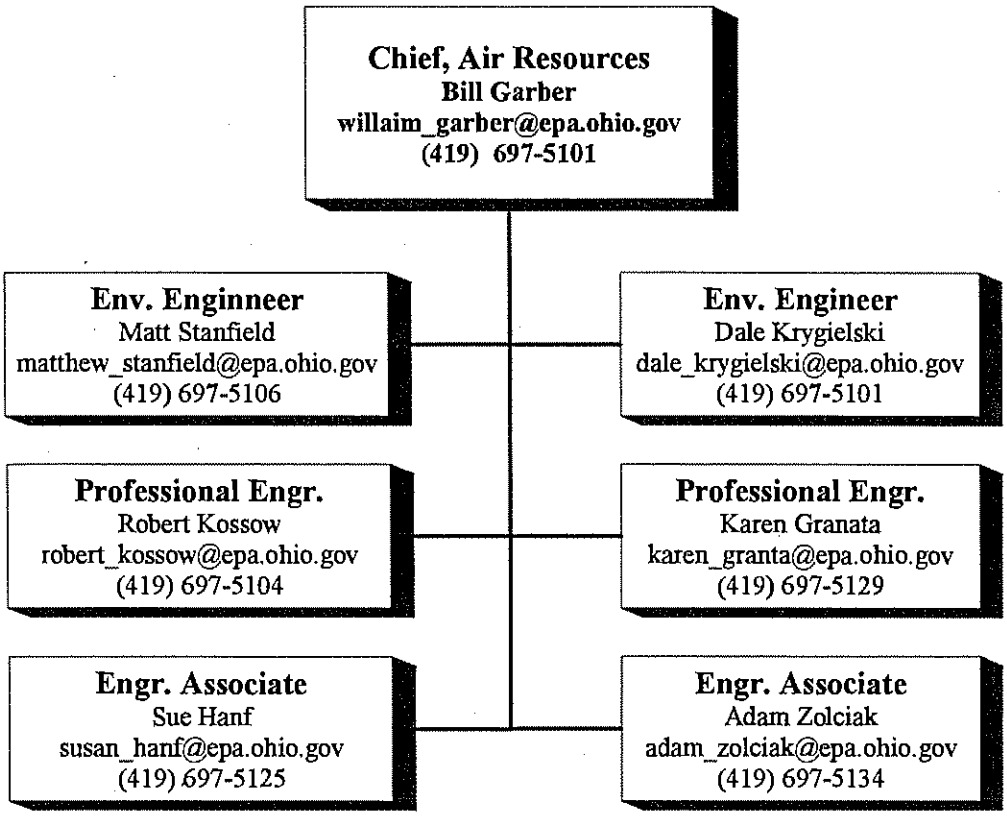


Central Office
Air Quality Modeling & Planning Section
Permit to Install Processing



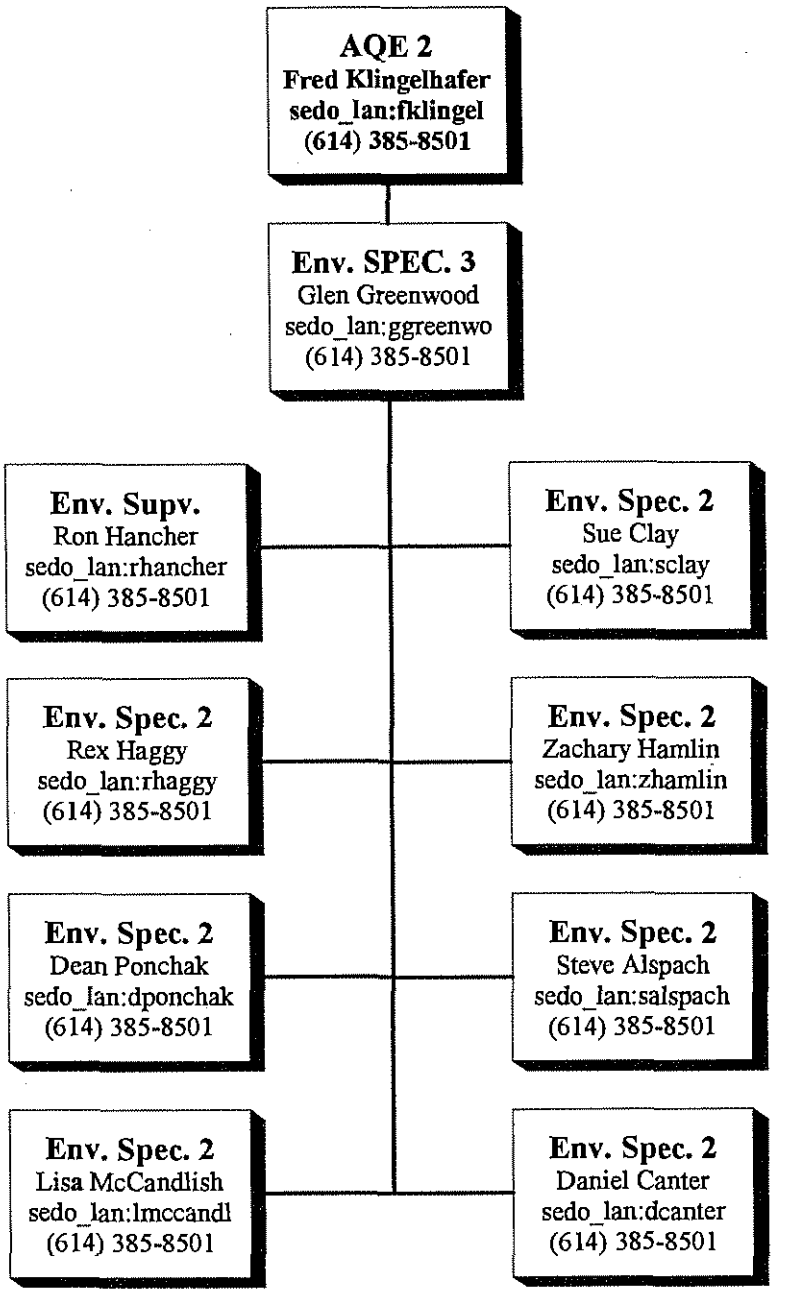
CITY OF TOLEDO
DIVISION OF
ENVIRONMENTAL SERVICES (DEC)
PERMIT TO INSTALL PROCESSING

INTERNET: "internet name@EPA.OHIO.GOV"



revised 6/17/96

Southeast District Office
Permit to Install Processing



REVISED 6/7/96

OhioEPA
State of Ohio Environmental Protection Agency

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TELE: (614) 644-3020 FAX: (614) 644-2329

MAILING ADDRESS:
P.O. Box 1049
Columbus, OH 43216-1049

cc: Misty
Alan
Jim
Further → Hotkins

TO: District Office Air Unit Supervisors and Local Air Agency Directors

FROM: Bob Hodanbosi, Chief, DAPC

SUBJECT: Foundry Emissions

DATE: October 2, 1995

DAPC staff recently met with the Ohio Cast Metals Association (OCMA) to discuss air pollution control issues related to foundries. The primary issue of discussion was the application of OAC rule 3745-21-07(G)(2), the making of cores and molds. There has been limited testing of the actual emissions from these operations, and the industry is willing to develop additional information on the quantity of emissions from core/mold making. Attached for your information is a letter from Russ Murray of the OCMA.

As a result of the lack of emissions data from core/mold making, there appears to be an inconsistent application of OAC rule 3745-21-07(G)(2) to this type of source. I am requesting that until DAPC provides further guidance on appropriate emission factors and the application of OAC 3745-21-07(G)(2), we not pursue any additional enforcement actions against core/mold making operations for possible violations of OAC 3745-21-07(G)(2). We expect to have a resolution of this issue or further guidance by January 1, 1996. Please contact me if you have any questions.

cc: Al Franks
Mike Hopkins
Jim Orlemann

Attachment

BH/kel

George V. Voinovich, Governor
Nancy P. Hollister, Lt. Governor
Donald R. Schregardus, Director

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August 10, 1995

Mr. Robert Hodanbosi, Chief
Division of Air Pollution Control
Ohio EPA
1600 Watermark Drive
P.O. Box 1049
Columbus, OH 43266-0149

Dear Mr. Hodanbosi:

On behalf of the members of the OCMA Environmental Affairs Subcommittee on (VOC) emissions, I would like to thank you, Al Franks, Jim Orleman, and Mike Hopkins for taking the time to meet with us last Thursday, August 3, 1995. We are pleased that the Division of Air Pollution Control has indicated a willingness to work with the Ohio metal casting industry to address a woeful lack of scientifically valid data regarding potential VOC emissions from the core/mold making process.

We have begun our efforts to collect existing information on emissions from mold and coremaking operations. We anticipate that we will meet your suggested 30 day time frame. Steps have also been taken to develop a proposal for addressing the requirements of O.A.C. 3745-21-07 (G) (2) as it applies to the foundry process.

Concerning the memorandum on this issue that you indicated would be sent to District Offices, would it be possible for you to send me a copy? Thank you.

I want to reiterate our gratitude for this opportunity to work with the Division of Air Pollution Control to resolve an issue of import to all of us. We are looking forward to working with you to achieve a solution acceptable to everyone. If you have any questions, please do not hesitate to call.

Sincerely,

Russ Murray

Russ Murray
Executive Director

cc: C. Frank De Meo, OCMA President
Arden C. Sims, OCMA Secretary
Steve Wilson, OCMA Vice President for Environmental Affairs
Members of the OCMA Environmental Affairs Subcommittee on VOC Emissions
Gerry Ioannides, Assistant Director, Ohio EPA
Al Franks, Ohio EPA
Jim Orleman, Ohio EPA
Michael E. Hopkins, Ohio EPA

cc: MISIY
ALAN
SAFAA
RENNAN : JENKINS

Ohio EPA
Division of Air Pollution Control

inter-office communication

to:	Bill Juris
from:	Rick Carleski, RC Supervisor, SBAP
subject:	Permitting and fee requirements for GDF's
date:	May 6, 1996

I have prepared a response to your March 20, 1996 memo concerning permit and fee requirements for GDF's. The Small Business Assistance Program has many GDF customers and is equally interested in resolving the issues listed in your memo.

Attached is a flowchart which summarizes the permitting and fee requirements for GDF's throughout Ohio. It has been recent DAPC policy not to include PTI/PTO exempt sources in the non-Title V fee system as outlined in Bob Hodanbosi's IOC of April 17, 1996.

Because they are not included in the OAC Rule 3745-31-03(A)(1)(ee) exemption, GDF's located in the following 29 counties are required to obtain both PTI's and PTO's. This requirement also subjects them to the non-Title V fee system:

Ashtabula	Greene	Montgomery
Butler	Hamilton	Portage
Clark	Jefferson	Preble
Clermont	Lake	Stark
Clinton	Licking	Summit
Columbiana	Lorain	Trumbull
Cuyahoga	Lucas	Warren
Delaware	Mahoning	Washington
Franklin	Medina	Wood
Geauga	Miami	

GDF's in all other Ohio counties are exempt from permitting and non-Title V fee requirements as long as the GDF has Stage I vapor control per OAC 3745-31-03(A)(1)(ee).

About Existing GDF's.....

GDF's that currently have PTO's or registrations and are not in the 29 counties listed above do not have to pay non-Title V fees. These facilities should still submit the blue emission fee cards but will not be billed. The DO/LAA's should indicate on the non-Title V fee summaries these GDF's are exempt. These PTO's and registrations can then be withdrawn upon renewal or IOC to Clara Dailey, PMU.

In addition please note the following:

1) Regardless of location, any GDF having a maximum annual throughput of less than 6000 gallons is exempt from permits or fees.

2) If a GDF requires a PTO or registration, the owner must pay the non-Title V fees.

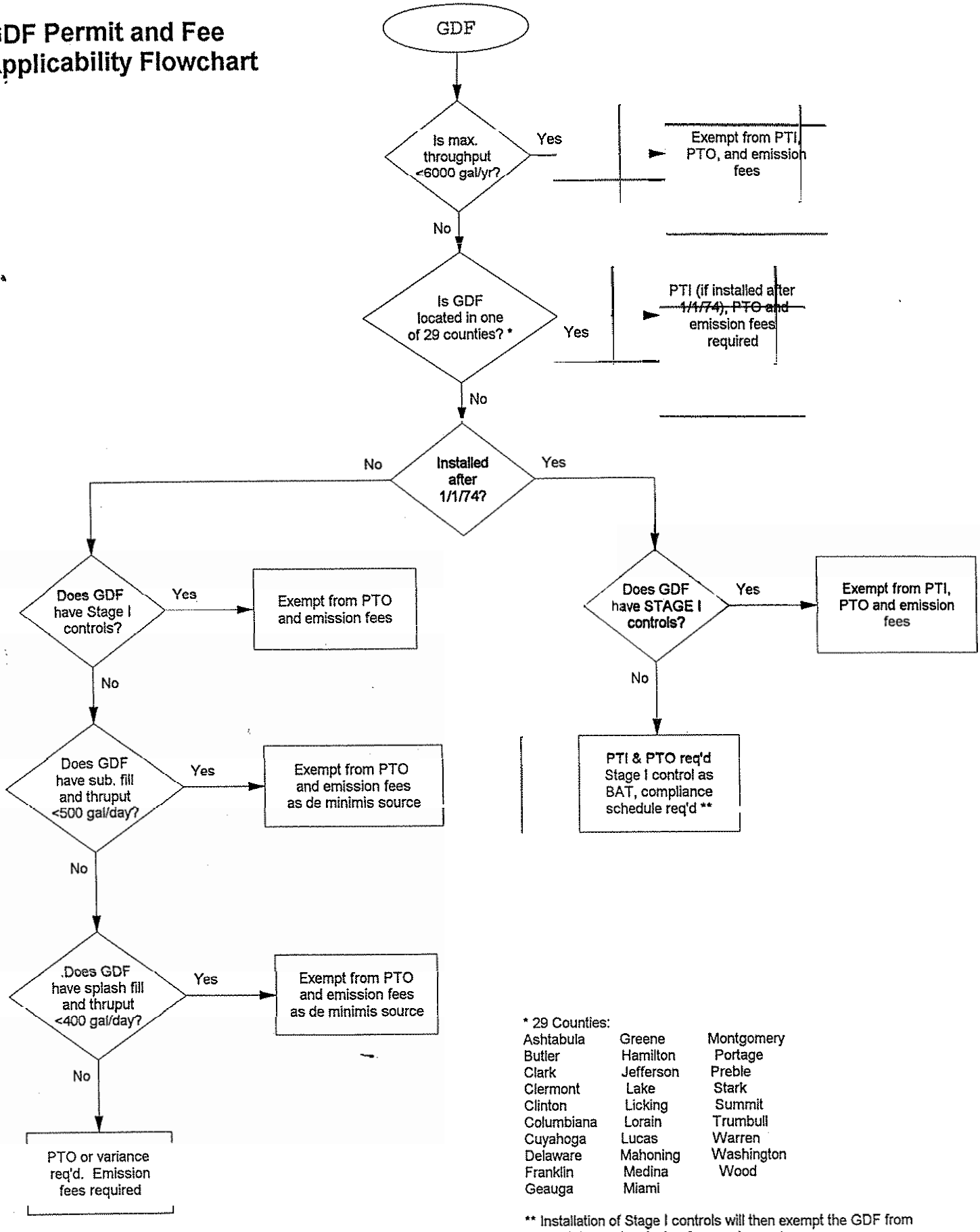
3) GDF's located at Title V facilities must be included as an emission unit in the facility's Title V application.

Please review this flowchart to see if it adequately addresses all of your concerns. Please submit any comments to me by May 20, 1996.

Thank you.

cc: Jim Orlemann, DAPC
Mike Hopkins, DAPC
Andrew Hall, DAPC
Clara Dailey, DAPC
Cindy DeWulf, DAPC
Tom Rigo, DAPC
LAA Directors
DO Unit Supervisors

GDF Permit and Fee Applicability Flowchart



* 29 Counties:

Ashtabula	Greene	Montgomery
Butler	Hamilton	Portage
Clark	Jefferson	Preble
Clermont	Lake	Stark
Clinton	Licking	Summit
Columbiana	Lorain	Trumbull
Cuyahoga	Lucas	Warren
Delaware	Mahoning	Washington
Franklin	Medina	Wood
Geauga	Miami	

** Installation of Stage I controls will then exempt the GDF from permitting and emission fee requirements.

OEPA inter-office communication

.o: DO & LAA Supervisors date: 12/3/93

JB MH

from: Jim Braun through Mike Hopkins, Manager - AQM&P

subject: Best Available Technology - GDF's

I am requesting your assistance in the determination of Best Available Technology for Gasoline Dispensing Facilities in regards to the Stage II requirements. Central Office has received numerous inquiries as to whether or not Stage II will be considered BAT for any new GDF. In order to develop a policy which can be applied consistently and fairly to all sources, the input from all of the DOs & LAAs is critical. As such, we are asking for your suggestions on how you believe BAT should be defined for GDFs. Once we receive your suggestions, we plan on developing a policy which will be distributed for your comments as well. In suggesting BAT, you should consider the following points:

1. Define the appropriate cut-off limits (e.g. annual & monthly throughputs) which will exempt the source from the Stage II BAT requirement.

2. Define the necessary control levels which should be achieved.

3. Define the appropriate components to be utilized - do the components need to be CARB approved?

4. Need for testing requirements as outlined in 21-09 DDD(2).

5. Recordkeeping requirements as outlined in 21-09 DDD(3).

Any other concerns regarding BAT for GDF's should be addressed as well. I would appreciate the submittal of your suggestions by January 14, 1994. Thank you for your cooperation in this matter.

MEH/JJB

cc: Bob Hodanbosi, DAPC
Jim Orlemann, DAPC
Bill Juris, DAPC
Sherri Swihart, DAPC
Alan Lloyd, DAPC
Misty Parsons, DAPC
Jim Braun, DAPC

FYI - Misty

OhioEPA

State of Ohio Environmental Protection Agency

INTER-OFFICE COMMUNICATION

TO: Distribution

FROM: Sherri Swihart through Bill Juris, DAPC

SUBJECT: Stage II questions

DATE: November 17, 1993

The following questions regarding Stage II policies were brought to our attention by Mr. Leon Ang from the Cleveland field office:

(1) ***Will all new or modified GDF's be required to install Stage II control equipment?*** In a Stage II regulated county, newly constructed GDF's (constructed after November 15, 1990) have until September 30, 1993 to be in compliance. Modified GDF's (i.e., existing GDF's with new tanks) would follow the appropriate compliance schedule. Please note that the standard 10,000 gallons/month and independent small business marketers 50,000 gallons/month exemptions apply to existing, modified and newly constructed GDF's. (A separate policy on Stage II BAT for new GDF's may be forthcoming.)

(2) ***Will all new or modified GDF's be required to install Stage I control equipment?*** Stage I is considered Best Available Technology (BAT) and is basically required for all new sources and modifications which would require a PTI. There is a policy on Stage I BAT.

(3) ***If an independent small business marketer has 2 GDF's and submitted a PTI application for a third GDF, what Stage II installation schedule would be required?*** The compliance schedule would be the same: 1 GDF by March 31, 1993, 2 GDF's by March 31, 1994, and all GDF's by March 31, 1995.

(4) ***How soon should the Stage II control equipment be tested?*** All testing should be completed by the compliance deadline.

(5) ***Will agency personnel be required to monitor the testing of the Stage II control equipment in order to accept the test results?*** Agency personnel should be given the opportunity to witness all tests and should monitor as many as possible. This is the reason for the 30 day test notification under OAC rule 3745-21-09(DDD)(2)(c).

(6) ***Some companies wanted a simplified operating instruction for the vacuum assisted type Stage II equipment, as the instructions in the regulations were geared for the vapor balance type Stage II equipment. What must be included in the operating instructions for consumers?*** The regulation only specifies operating instructions. If the system is vacuum assist, then the instructions could reflect this. The instructions would still specifically prohibit topping off and include the 1-800 phone number for complaints.

(7) ***What font, type or letter size is to be used in the Stage II operating instructions?*** There is no font, type or letter size specified in the regulation for operating instructions only that these instructions should be "conspicuously posted" in each gasoline dispensing area. The letter size should be large enough for the motorist to readily see while attempting to pump gasoline.

(8) ***The "Suspension of Control Requirements" in OAC Rule 3745-21-09(DDD)(5) should also be mentioned (in the terms and conditions). If this rule was suspended in the future, would the source owner or operator still be required to install Stage II control equipment?*** The installation of Stage II control equipment would not be required under these circumstances but it looks as if only the Toledo area will need to be concerned with this issue. Stage II is still currently needed for the required 15% rate-of-progress reduction in the other areas. The "Suspension of Control Requirements" do not need to be mentioned in the terms and conditions.

(9) ***If a facility submitted a PTI application to replace a diesel storage tank, would the gasoline storage tanks in the GDF be required to install Stage II control equipment?*** The gasoline dispensing facility is required to be equipped with Stage II vapor controls if the GDF is already subject to the Stage II regulations or if the diesel tank was replaced with a gasoline tank thereby increasing their throughput over the exemption level.

(10) ***How should the difference between the PTI's for the GDF's and the PTI's for all other sources be addressed? For that matter, would the modifications be different from the PTI's?*** The worksheets for the GDF's will remain the same as before.

There have also been a number of questions brought to our attention from other local air agency and district office personnel, gasoline marketers, and industrial firms

regarding Stage II issues which are not stated in the regulations. The following specific remarks and guidelines are based on discussions with the U.S. EPA:

(11) ***Decertification of CARB Certified Components:*** Some components which were CARB certified may become decertified because of modified testing techniques. These components which had met CARB's specific requirements for approval (95% control), now may not pass with the more rigorous testing standards. If this situation should occur, the facility would be required to replace their decertified components with certified components. The allowable time frame for the phase-out would be the life of the component. That is, when the decertified component is replaced it must be replaced with a current CARB certified component. A time period greater than four years would not be considered reasonable by the U.S. EPA.

(12) ***Independent Small Business Marketer Exemption and Compliance Deadline:*** The 50% income requirement for independent small business marketers (ISBMs) must be calculated on a facility-by-facility basis. Furthermore, this income must be based on a gross income. This pertains to the condition under OAC rule 3745-21-01(H)(9)(d). Also, when there is more than one facility owned by an independent small business marketer, even the exempted facilities should be included in the compliance deadlines (33 percent by March 31, 1994; 66 percent by March 31, 1995; and 100 percent by March 31, 1996). For example, if an independent small business marketer owns three stations, two of which are less than 50,000 gallons per month, then the owner would already have two GDFs in compliance. Therefore, the third station would need to have Stage II installed by March 31, 1996.

(13) ***Stage II Exemption Exceedances:*** Facilities which claim a Stage II exemption (i.e., 10,000 gallons per month or 50,000 gallons per month for independent small business marketers) and then dispense gasoline above the exemption level for one month or more are required to install Stage II within the stated compliance deadline appropriate to the facility under OAC rule 3745-21-04(C)(64). (For example, a gasoline dispensing facility which previously had a throughput less than 10,000 gallons per month begins dispensing 15,000 gallons per month in November of 1993. This facility would be required to install Stage II by March 31, 1995.) If the facility has a throughput greater than the exemption level sometime after the final compliance date, then they would provide an expeditious compliance schedule immediately to the appropriate local air agency or district office. At a minimum, a facility would have to comply no later than two years after it exceeded the 10,000 gallons per month. Any non-Stage II dispensing of gasoline from a non-exempted facility, or a previously exempted facility that no longer is exempted, after the appropriate compliance deadline in OAC rule 3745-21-04(C)(64) can be subject to an enforcement action and civil penalties.

(14) ***Gasoline Dispensing at Automotive Assembly Plants:*** All gasoline dispensing at an automotive assembly plant is collectively subject to the Stage II requirements under OAC rule 3745-21-09(DDD). This applies to the dispensing of gasoline into newly assembled vehicles and to the dispensing of gasoline into vehicles driven onto or around the plant.

If you have any further questions regarding Stage II or the answers above, please call me at (614)644-3594.

xc: NEDO (Dennis Bush)
NWDO (Gerald Rich)
Cleveland (Doug Seaman)
Toledo (Dale Krygielski)
RAPCA (Curt Marshall)
Cincinnati (Harry St. Clair)
Akron (Jerry Garro)
Lake County (Leon Weitzel)
CDO (Don Cavote)
SWDO (Phil Hinrichs)
SEDO (Fred Klingelhafer)
Canton (Bruce Blankenship)
NOVAA (Harold Stroymeyer)
Portsmouth (Don Walden)
Jim Orlemann (DAPC)
Mike Hopkins (DAPC)

inter-office communication

to: New Source Review Contacts date: May 15, 1987

from: Bob Hodanbosi, Manager, AQM&P

subject: Best Available Technology for Gasoline Dispensing Facilities

The New Source Review Subcommittee has been evaluating a uniform approach for the definition of best available technology (BAT) for gasoline dispensing facilities (GDFs). After a review of current practices, the following information is provided to define BAT for GDFs in both urban and rural aeras.

Urban Areas

All sources with an annual throughput of 6,000 gallons will be required to install Stage I vapor control. Sources with less than 6,000 gallons can be exempted from the Stage I requirement if the applicant provides a valid reason for the exemption. This decision can be made at the field office.

An "urban area" is defined as the following counties: Butler, Clermont, Cuyahoga, Franklin, Greene, Hamilton, Lake, Lorain, Lucas, Mahoning, Medina, Montgomery, Portage, Stark, Summit, Trumbull, Warren and Wood.

Rural Areas

BAT for a GDF in a rural area will be:

1. GDFs less than 6,000 gallons per year will not be required to install a vapor balance system.

2. GDFs between 6,000 and 12,000 gallons per year can be exempted from the Stage I requirement if the facility can provide evidence of a hardship due to the imposition of Stage I vapor control. The field office can make the determination if the source should not be required to install Stage I controls.

3. Sources with an annual throughput greater than 12,000 gallons are required to install a Stage I vapor balance system.

A rural county is any county not listed above under "Urban Areas."

Also, for the sources in the rural counties, a term and condition should be added to the permit to install that requires the applicant to submit a permit to operate application. If eligible, these sources can be placed on registration status.

Please contact me at (614) 466-6116 if you have any questions.

BH/jlc

cc: Jim Orlemann

GEN 1001 (3/84)

POTENTIAL TO EMIT - LIMITING HAPS

- WHY? / WHEN?
- SAMPLE CALC
- WHAT LIMITS NEEDED FOR PERMITS?
- TERMS AND CONDITIONS

WHY/WHEN CALC HAP?

- 1990 CAA - 189 HAPS
- 10/25 TITLE V
- AVOID TITLE V
- IF IT IS TITLE V - NO NEED TO CALC.
- PTE < 10 TON - NO NEED TO CALC.
- POSSIBLE MACT LIMITS

EXAMPLE: PAINTING OPERATION

- ONE COATING LINE
- 2 COATINGS - PRIME AND TOP COATS
- 8 H/D, 5 D/W, 50 W/Y
- NO OTHER HAP SOURCES

PRIME COAT

- FROM APPLICATION AND MSDS
- 10% BY VOL XYLENE
- 20% BY VOL TOLULENE
- 70% BY VOL SOLIDS AND WATER
- 5 GALLONS/HR MAX
- 10,000 GALLON/YR ACTUAL

TOP COAT

- FROM APPLICATION AND MSDS
- 7% BY VOL XYLENE
- 2% BY VOL TOLULENE
- 88% BY VOL SOLIDS AND WATER
- 4 GALLONS/HR MAX
- 9,000 GALLON/YR ACTUAL

QUESTIONS

- TITLE V FOR HAPS?
- CAN THEY AVOID TITLE V?

CALCULATION STEPS

- CALCULATE INDIVIDUAL AND COMBINED HAPS FOR EACH COATING
- SUM INDIVIDUAL HAPS FOR EACH HAP
- SUM COMBINED HAPS FOR ALL COATINGS
- SEE HANDOUT

Table 1: Calculation of Individual HAP Emissions for Each Coating

Instructions: Use this chart to calculate the individual HAP emissions and the combined HAP emissions for each coating. Fill out this table for each coating that contains a HAP.

Coating Identification: PRIME COAT

	A	B	C = A x B	D	E = C x D	F = E x 4.38	G	H = C x G / 2000
Individual HAP	% by Vol	HAP Density	HAP Content % by wt.	Max Gallon Usage	Max Short Term	Max Annual HAP Emission	Annual Gallon Usage	Actual Emissions (Annual)
	gal HAP / gal coat	lb HAP / gal HAP	lb HAP / gal coat	gal coat / Hr	lb HAP / hr	ton / yr	gal / yr	ton / yr
XYLENE	0.10	7.2	0.72	5	3.6	15.77	10,000	3.6
TOLULENE	0.20	7.2	1.44		7.2	31.5	10,000	7.2
Combined HAPs			2.16		10.8	47.3		10.8

Table 1: Calculation of Individual HAP Emissions for Each Coating

Instructions: Use this chart to calculate the individual HAP emissions and the combined HAP emissions for each coating. Fill out this table for each coating that contains a HAP.

Coating Identification: TOP COAT

	A	B	C = A x B	D	E = C x D	F = E x 4.38	G	H = C x G / 2000
Individual HAP	% by Vol	HAP Density	HAP Content	Max Gallon Usage	Max Short Term	Max Annual HAP Emission	Annual Gallon Usage	Actual Emissions (Annual)
	gal HAP / gal coat	lb HAP / gal HAP	lb HAP / gal coat	gal coat / Hr	lb HAP / hr	ton / yr	gal / yr	ton / yr
XYLENE	0.07	7.2	0.504	4	2.02	8.85	9000	2.27
TOLULENE	0.02	7.2	0.144		0.572	2.50	"	0.65
MEX	0.30	6.72	2.02		8.08	35.4	"	9.09
Combined HAPs			2.66		10.66	46.67		12.01

Table 2: Summation of Individual HAP Emissions from All Coatings (Fill out this table for each HAP)

Coating HAP: XYLENE

Coating ID	Maximum Annual HAP (ton/yr)	Actual HAP Emissions (ton/yr)
PRIME COAT	15.77	3.6
TOP COAT	8.85	2.27
Total individual HAP Emissions	24.62	5.87

Coating HAP: TOLULENE

Coating ID	Maximum Annual HAP (ton/yr)	Actual HAP Emissions (ton/yr)
PRIME COAT	31.5	7.2
TOP COAT	2.50	0.65
Total individual HAP Emissions	34.0	7.85

Coating HAP: MEK

Coating ID	Maximum Annual HAP (ton/yr)	Actual HAP Emissions (ton/yr)
TOP COAT	35.4	9.09
Total individual HAP Emissions	35.4	9.09

Coating HAP: _____

Coating ID	Maximum HAP Emissions (ton/yr)	Actual HAP Emissions (ton/yr)
Total individual HAP Emissions		

Table 3: Combined HAP Table:

Fill out this table using the results from table 1.

Coating ID	Maximum Annual Combined HAPs (ton/yr)	Actual Emissions Combined HAPs (ton/yr)
PRIME COAT	47.3	10.8
	46.67	12.1
Total Combined HAP Emissions	93.97	22.9

CALCULATION SUMMARY

- NO DIFFERENT THAN VOC
- JUST MUST DO FOR EACH HAP

PERMIT LIMITS - METHOD 1

- MAX INDIVIDUAL HAP CONTENT
- MAX COMBINED HAP CONTENT
- MONTHLY GALLON LIMITATION
- WORKS BEST WITH FEW COATINGS
- USEPA APPROVED

PERMIT LIMITS - METHOD 2

- MONTHLY CALC OF EMISSIONS
- INDIVIDUAL HAP EMISSIONS
- COMBINED HAP EMISSIONS
- NO HAP CONTENT LIMITS
- NO GALLON LIMITS
- WORKS BEST FOR MULTIPLE COATINGS
- USEPA APPROVED? - COURT CASE - STATE PERMITS RESTRICT PTE

TERMS AND CONDITIONS

- ABOVE LIMITATIONS
- RECORDKEEPING
- EXCEEDANCE REPORTING

TERMS AND CONDITIONS

- STILL UNDER CONSTRUCTION
- QUESTIONS/COMMENTS?

W.7 Annual Coating Usage Limitations Based Upon Rolling 365-Day and 12-Month Summations, Where Additional Limitations Are Needed During the First 12 Calendar Months of Operation or During the First 12 Calendar Months Following Issuance of the Permit

XXXX1 - specify the maximum allowable annual coating usage
XXXX2 - specify either 365-day or 12-month
XXXX3 - add the wording "following the issuance of this permit", if applicable
XXXX4 - for each month, specify the maximum allowable cumulative coating usage (e.g., 15,000 gallons)

The maximum annual coating usage for this emissions unit shall not exceed [XXXX1], based upon a rolling, [XXXX2] summation of the coating usage figures.

To ensure enforceability during the first 12 calendar months of operation [XXXX3], the permittee shall not exceed the coating usage levels specified in the following table:

Month(s)	Maximum Allowable Cumulative Coating Usage
1	[XXXX4]
1-2	[XXXX4]
1-3	[XXXX4]
1-4	[XXXX4]
1-5	[XXXX4]
1-6	[XXXX4]
1-7	[XXXX4]
1-8	[XXXX4]
1-9	[XXXX4]
1-10	[XXXX4]
1-11	[XXXX4]
1-12	[XXXX4]

After the first 12 calendar months of operation [XXXX3], compliance with the annual coating usage limitation shall be based upon a rolling, [XXXX2].

xxx.a Recordkeeping requirements for a coating line or printing line that emits Hazardous Air Pollutants (HAPs), and it is necessary for the permittee to determine the annual HAP emissions from the line

The permittee shall collect and record the following information each month:

(a) The name and identification number of each coating, as applied.

(b) The individual Hazardous Air Pollutant (HAP)[1] content for each HAP of each coating in pounds of individual HAP per gallon of coating, as applied.

(c) The total combined Hazardous Air Pollutant (HAP) content for each HAP of each coating in pounds of combined HAPs per gallon of coating, as applied (sum all the individual HAP contents from b).

(d) The number of gallons of each coating employed.

(e) The name and identification of each cleanup material employed.

(f) The individual HAP content for each HAP of each cleanup material in pounds of individual HAP per gallon of cleanup material, as applied.

(g) The total combined HAP content of each cleanup material in pounds of combined HAPs per gallon of cleanup material, as applied (sum all the individual HAP contents from f).

(h) The number of gallons of each cleanup material employed.

(i) The total individual HAP emissions for each HAP from all coatings and cleanup materials employed, in pounds or tons per month and pounds or tons per rolling 12 month period (for each HAP the sum of b times d for each coating and the sum of f time h for each cleanup material).

(j) The total combined Hazardous Air Pollutant (HAP) emissions from all coatings and cleanup materials employed, in pounds or tons per month and pounds or tons per rolling 12 month period (the sum of c times d for each coating plus the sum of g times h for each cleanup material).

[1]A listing of the Hazardous Air Pollutants (HAPs) can be found in Section 112(b) of the Clean Air Act or can be obtained by contacting your Ohio EPA field office or local air agency contact. Material Safety Data Sheets typically include a listing of the solvents contained in the coatings or cleanup materials. This information does not have to be kept on a line-by-line basis.

(Term ID:B.4.e:062895)

xxx.b Reporting requirements for a coating line or printing line in which it is necessary for the permittee to determine the annual HAP emissions from the line

The permittee shall notify the Director of any monthly record showing any deviation from the following:

(a) An identification of all months during which the Hazardous Air Pollutant (HAP) content limitation(s) were exceeded (pound of individual HAP per gallon of coating or pound of combined HAP per gallon of coating limitations).

(b) The total individual HAP emissions limitation for each HAP from all coatings and cleanup materials employed, in pounds or tons per month and pounds or tons per rolling 12 month period.

(c) The total combined HAP emissions from all coatings and cleanup materials employed, in pounds or tons per month and pounds or tons per rolling 12 month period.

(d) Exceedances of the rolling, [XXXX1] limitation and, for the first 12 calendar months of operation [XXXX2], all exceedances of the maximum allowable cumulative coating usage levels.

These reports shall include a description of the deviation, as well as the corrective actions that were taken to achieve compliance. The permittee shall submit annual reports which identify all exceedances of the above limitations, as well as the corrective actions that were taken to achieve compliance. These reports shall be submitted by January 31 of each year.

(Term ID:B.4.e:062895)

Table 1: Calculation of Individual HAP Emissions for Each Coating

Instructions: Use this chart to calculate the individual HAP emissions and the combined HAP emissions for each coating. Fill out this table for each coating that contains a HAP.

Coating Identification: _____

	A	B	C = A x B	D	E = C x D	F = E x 4.38	G	H = C x G / 2000
Individual HAP	% by Vol	HAP Density	HAP Content	Max Gallon Usage	Max Short Term	Max Annual HAP Emission	Annual Gallon Usage	Actual Emissions (Annual)
	gal HAP / gal coat	lb HAP / gal HAP	lb HAP / gal coat	gal coat / Hr	lb HAP / hr	ton / yr	gal / yr	ton / yr
Combined HAPs								

Table 2: Summation of Individual HAP Emissions from All Coatings (Fill out this table for each HAP)

Coating HAP: _____

Coating ID	Maximum Annual HAP (ton/yr)	Actual HAP Emissions (ton/yr)
Total individual HAP Emissions		

Coating HAP: _____

Coating ID	Maximum Annual HAP (ton/yr)	Actual HAP Emissions (ton/yr)
Total individual HAP Emissions		

Coating HAP: _____

Coating ID	Maximum Annual HAP (ton/yr)	Actual HAP Emissions (ton/yr)
Total individual HAP Emissions		

Coating HAP: _____

Coating ID	Maximum HAP Emissions (ton/yr)	Actual HAP Emissions (ton/yr)
Total individual HAP Emissions		

Table 3: Combined HAP Table:

Fill out this table using the results from table 1.

Coating ID	Maximum Annual Combined HAPs (ton/yr)	Actual Emissions Combined HAPs (ton/yr)
Total Combined HAP Emissions		

Action Memo

SYNTHETIC ORGANIC CHEMICAL MANUFACTURERS ASSOCIATION

March 16, 1995

TO: Potential to Emit Workgroup

FROM: Sherry L. Edwards

RE: SOCMA Guidance on Calculating Potential Emissions

Please find attached for your review and comment the draft SOCMA guidance on calculating potential emissions from a batch process. As we agreed, this guidance will be distributed to the SOCMA membership and submitted to EPA in hopes that the Agency will adopt the recommended methodology as official guidance. I have spoken with EPA staff and told them we would forward the revised information to them shortly.

Please submit your comments to me by no later than Thursday, March 23. You may call me at (202) 414-4170 or fax comments to me at (202) 289-8584. Thank you for your prompt attention to this matter.

Attachment

RECEIVED
MAR 20 1995
W.S. TURETSKY

1100 NEW YORK AVENUE, N.W. • SUITE 1090 • WASHINGTON, DC 20005 • TELEPHONE (202) 414-4100

HOW TO CALCULATE POTENTIAL EMISSIONS FROM A BATCH PROCESS TO DETERMINE MAJOR SOURCE STATUS UNDER THE CLEAN AIR ACT

Graphic

GUIDANCE PREPARED BY THE SYNTHETIC ORGANIC CHEMICAL MANUFACTURERS ASSOCIATION

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SOCMA GUIDANCE ON POTENTIAL TO EMIT

HOW TO DETERMINE IF A BATCH PROCESSING FACILITY IS A MAJOR SOURCE

1.0 Introduction

- **1.1** Need for Guidance on PTE
- **1.2** EPA Policy on Inherent Operational Limitations
- **1.3** Intended Use for Guidance

2.0 Five (5) Step SOCMA PTE Emission Estimation Methodology

- **2.1** ACT Derived AERs
- **2.2** Percent Equipment Utilization
- **2.3** Interchangeable Equipment Determinations
- **2.4** Data Tabulation
- **2.5** Selection of PTE

3.0 Model PTE Calculations

Appendices

- Appendix A: USEPA Guidance on PTE
- Appendix B: Typical Batch Sheet
- Appendix C: Batch Percent Utilization/Emission Spreadsheet Form
- Appendix D: Batch Potential to Emit Spreadsheet Form

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WHO IS THE SYNTHETIC ORGANIC CHEMICAL MANUFACTURERS ASSOCIATION

The Synthetic Organic Chemical Manufacturers Association (SOCMA) is a trade association serving more than 230 companies that have a common interest in the manufacture, distribution and marketing of organic chemical products. The majority of SOCMA's members are small businesses with annual sales under $40 million. SOCMA member companies are representative of a much larger number of organic chemical manufacturers throughout the United States. Most of SOCMA's manufacturing member companies utilize batch processes and many are custom chemical manufacturers who produce specialty chemicals by contracting with larger companies.

Batch processing provides an efficient and frequently the only method to make small quantities of chemicals to meet specific needs and consumer demands for specialized products. Batch processors must be able to respond quickly to new requirements by customers, fill small market niches and develop new products. They are at the cutting edge of new technology, provide products often made nowhere else in the world and help keep imports down by responding quickly to customer demands for service and delivery. This segment of the chemical industry retains a high degree of entrepreneurship and must retain the flexibility to meet ever changing needs and new technological developments.

Batch processes are distinct from continuous operations in that a continuous operation has a constant raw material feed to each unit operation and continual product withdrawal from each unit operation. A batch process has an intermittent introduction of frequently changing raw materials into the process, varying process conditions imposed on the process within the same vessel and, consequently, an intermittent release of air emissions. Vessels are often idle while waiting for raw materials, waiting for quality control checks, undergoing cleaning, etc. Thus the possibility for emissions from a batch process is substantially different from that of a continuously operating process.

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SECTION 1 - INTRODUCTION

SECTION 1.1 - NEED FOR GUIDANCE ON POTENTIAL TO EMIT

There is a great need for guidance on how to calculate potential-to-emit (PTE) for batch processing facilities. Applicability of most of the Clean Air Act's rules are based on a source's "potential to emit."

SOCMA has repeatedly objected to the Environmental Protection Agency's (EPA's) current definition of "potential to emit" because it allows sources to consider only "federally enforceable" controls or other restrictions on emissions when calculating PTE. There is no statutory requirement that controls be federally enforceable; therefore, SOCMA has recommended that the Agency recognize non-federally enforceable controls.

While this is a legal interpretation of significant concern, this guidance focuses on a technical component of the potential to emit issue: a methodology for calculating potential emissions from batch processes, which accounts for inherent limitations on the operation of such processes. Because batch facilities use the same equipment to manufacture a variety of products in a given year, it is physically impossible for these facilities to produce all of these products on a 24 hours a day, seven day a week basis. Therefore, the calculation of potential emissions from these facilities must consider equipment utilization rates for each product/process and their relationship to one another. This requires the consideration of the physical attributes of a process before controls are even considered.

For instance, a company produces products A and B and owns equipment U, W, X, Y and Z to manufacture them. The company utilizes equipment U, W and X to manufacture product A; and X, Y and Z to manufacture product B. Processes to manufacture products A and B both utilize equipment X; therefore, it is impossible for the facility to run both processes at the same time. The calculation of potential emissions must recognize this equipment utilization factor in order to yield an estimate of potential emissions over time which is physically possible at this particular plant.

The effect of emissions controls is not of concern at this point in the calculation of potential emissions. Of course, controls may further limit a source's actual and potential emissions; however, it is important to consider the issues of a source's actual ability to generate air emissions and the reductions achieved by controls separately.

SOCMA is concerned with this issue because many states are requiring batch facilities to calculate their potential emissions using the same methodology as applied to continuous operations, which requires an assumption of a 24 hours a day, seven days a week operation. This methodology greatly inflates estimates of potential emissions

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beyond what is physically possible for batch facilities that use the same equipment to produce a variety of products.

The Agency has released guidance on PTE issues; however, none of the information adequately addresses the specific concerns of batch processors. For example, the Agency touches upon PTE issues in its February 1994 Alternative Control Technology (ACT) document for batch processes; however, calculation procedures are not addressed. SOCMA has developed guidance to provide a more realistic way of calculating potential emissions from a batch process. The following information is being provided to assist you in working with your permitting agencies to calculate potential emissions from your batch facility. The calculation methodology was developed by SOCMA's Air Committee and is not official government guidance. However, SOCMA is urging the Agency to adopt this methodology as official guidance.

SECTION 1.2 - EPA POLICY ON INHERENT OPERATIONAL LIMITATIONS

The Agency has defined PTE similarly in various Clean Air Act rules. For example, in the Part 63 General Provisions, EPA defines PTE as:

> *The maximum capacity of a stationary source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the stationary source to emit a pollutant including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is federally enforceable. (40 CFR Section 63.2)*

However, under EPA policy not all operational limitations have to be federally enforceable. In January 1995 guidance (see Appendix A), the Agency discusses inherent limitations on the potential to emit which may be considered without being federally enforceable:

> *Clearly, there are sources for which inherent physical limitations for the operation restrict the potential emissions of individual emission units. Where such inherent limitations can be documented by a source and confirmed by the permitting agency, EPA believes that States have the authority to make such judgments and factor them into estimates of a stationary source's potential to emit.*

SOCMA applauds the Agency for including this language in the guidance. Equipment availability (or more appropriately unavailability) is certainly an inherent

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physical limitation on a particular operation. The SOCMA methodology provides for documentation of both the products manufactured and the equipment used to manufacture these products. The methodology begins with the largest emitting product/process and methodically rules out other processes that cannot be manufactured at the same time. These physical restraints on the facilities operations are not based on a decision to limit production requiring enforceability. Quite simply, it is physically impossible to operate beyond this worst case scenario given a finite list of products and equipment. The documentation required in SOCMA's methodology is sufficient to demonstrate this.

SECTION 1.3 - INTENDED USE OF GUIDANCE

This guidance was developed to assist companies that must calculate potential emissions to determine major source status under the Clean Air Act. It is not intended as the sole method of calculating potential emissions. There are other methods and scenarios under which a source may need to calculate potential emissions. For instance, a batch facility that is already considered major and required to apply for an operating permit may wish to pursue another methodology that results in the highest PTE conceivable in order to avoid triggering permit modifications when making a change that increases its PTE.

The methodology does have limitations. For instance, the methodology relies on the utilization of existing equipment and a specific product mix. Whenever new products or equipment are brought on-site, the source would have to recalculate PTE based on the changes. SOCMA recognizes that this may be time consuming for those facilities that frequently bring new products on line and, therefore, does not advocate this guidance as the sole methodology for calculating PTE. SOCMA does believe that it provides a useful alternative to the 24 hours a day, seven days a week standard currently mandated by some state permitting authorities.

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SECTION 2 - EMISSION ESTIMATION METHODOLOGIES

In general, SOCMA recommends a five (5) step procedure for calculating potential to emit to determine if a batch processing facility is a major source. Each step is described below.

SECTION 2.1 - CALCULATION OF PRODUCT SPECIFIC ANNUAL EMISSION RATES FOR SPECIFIC EQUIPMENT TRAINS NEEDED TO PRODUCE SPECIFIC PRODUCTS (STEP #1)

The USEPA's 1994 Alternatives Control Technology (ACT) Document contains several equations for calculating emissions for various types of batch operations. In addition, the ACT Document implies that the following methodology should be used for converting these emission calculations to Annual Emission Rates (AER):

Equation 2.1:

$$\text{(AER) Product M Pollutant X} = \frac{\text{ACT Derived Total Emissions Per Batch} \times 8760 \ \frac{\text{Hours}}{\text{Year}}}{\text{(Time in hours required for the piece of equipment in The Batch Train that is used the most)}}$$

Where AER = Annual Emission Rate for Pollutant X for Product M to be produced in a specific batch train. (It should be noted that the above calculation assumes that Product M is the only product produced in the batch train.)

To complete Step 1, calculate the AER values for every pollutant regulated by the Clean Air Act for every batch train needed to produce a specific product.

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SECTION 2.2 - CALCULATION OF EQUIPMENT UTILIZATION PERCENTAGES FOR EACH PIECE OF EQUIPMENT IN THE BATCH TRAIN NEEDED TO PRODUCE A SPECIFIC PRODUCT (STEP #2)

Step 2 of the PTE analysis can be completed by extracting from batch sheets the time needed to run each piece of equipment in every batch train. The following equation should be used to calculate percent utilization (i.e., percentage of time required for every piece of equipment for every product which can be produced in the batch train):

Equation 2.2:

$$\text{Percent Utilization Product M} = 100\% \times \frac{\text{(Time in hours of individual piece of equipment)}}{\text{(Maximum hours for piece of equipment with the largest time)}}$$

A typical batch sheet is provided in Appendix B to illustrate the use of Equation 2.2. Note that the batch train for hypothetical Product H consists of a reactor, a centrifuge, and a dryer. Reaction, centrifugation, and drying times for Product H are 120, 240, and 120 hours, respectively. Therefore, using Equation 2.2, the percent utilization for the reactor is $100\% \times \frac{120}{240}$ or 50%.

Similarly, percent utilizations for the centrifuge and dryer are 100% and 50%, respectively.

SECTION 2.3 - DETERMINATIONS INVOLVING INTERCHANGEABLE EQUIPMENT (STEP #3)

To complete Step 3, identify interchangeable or alternative equipment which can be substituted for equipment normally used to make a particular product by examining batch sheets. Referring to Appendix B, note that reactor R-6B and centrifuge C-4 can be substituted for reactor R-5 and centrifuge C-5.

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SECTION 2.4 - TABULATION OF AER, PERCENT UTILIZATION, AND INTERCHANGEABLE EQUIPMENT DETERMINATIONS (STEP #4)

Step 4 can be completed by recording, in a Batch Percent Utilization/Emission Spreadsheet, the AER values (from Step 1) for each product that emits a regulated pollutant. A blank form is provided in Appendix C. In the same spreadsheet, record percent utilization (Step 2) for each piece of equipment which makes up the batch train for a specific product and also indicate interchangeable equipment (Step 3). It should be noted that separate spreadsheets must be filled out for each hazardous air pollutant (HAP) and for each criteria pollutant. Examples are provided in Section 3 of this manual to help the user complete Step 4 of the procedure.

SECTION 2.5 - SELECTION OF PTE (STEP #5)

SECTION 2.5.1 - PTE FOR A SINGLE PIECE OF BATCH PROCESSING EQUIPMENT

PTE for a batch process which requires only a single piece of equipment (e.g., one reactor) is equal to the worst case Annual Emission Rate (AER) for that piece of equipment. Worst case AER is determined by first computing AER values for every product which can be produced in this piece of equipment and then by selecting the highest AER value. To summarize, PTE for a single piece of equipment is equal to the highest AER value and assumes that the product with the highest AER value will be the only product produced in that piece of equipment.

SECTION 2.5.2 - PTE FOR OTHER BATCH PROCESSING FACILITIES

PTE for batch processing facility with more than one piece of equipment must be determined by completing Step 5 of the SOCMA procedure. To complete Step 5, examine the emissions and percent utilization data for each matrix generated in Step 4 and select maximum emissions for each pollutant by fully utilizing all available equipment which can be used to produce a particular product. Do not exceed 100% utilization for any piece of equipment. The examples in Section 3.0 will teach the user how to fill out a Batch PTE Spreadsheet. Please note that a blank PTE Batch Spreadsheet form is also provided in Appendix D.

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SECTION 3 - MODEL PTE CALCULATIONS

A hypothetical custom chemical batch processing facility has 23 point sources which emit 3 HAPs (toluene, methanol and hexane) and one criteria pollutant (VOCs) during the manufacture of 21 products (identified as letters A through T.) To determine the applicability of Clean Air Act requirements such as Title V permitting, Reasonably Available Control Technology (RACT) standards, and Section 112 (g) for future modifications, this facility must determine its potential to emit and wishes to use the SOCMA recommended calculation procedures.

3.1 Calculation of Toluene PTE

By following the calculation procedures and completing the Batch Percent Utilization Spreadsheet described in Section 2.4 above, we can see that, as indicated in Table 1A, toluene can be emitted from 7 batch reactors, 3 batch dryers, 3 batch centrifuges, and 1 thin film evaporator. Toluene is emitted in the production of 7 different products.

Product G is the largest emitter of toluene and requires batch reactor R-5 for the entire batch time (i.e., 100% utilization). Since reactors R-5 and R-6B are interchangeable, the maximum toluene emissions for process G is two (2) times the toluene emission rate for one train or 2 x 3.92 = 7.84 TPY. By making this worst case selection, we have tied up both reactors R-5 and R-6B 100% of the time. Therefore, no other process can be run or considered that requires these reactors. Consequently, only Processes C and F can be run concurrently with Process G since all other products require reactors R-5 or R-6B. By inspection, there is no equipment conflict between C and F, so they can be operated concurrently 100% of the time. Therefore, their toluene emissions are added to twice G's emissions to calculate a total toluene plant-wide potential to emit of 9.1 ton/year (see Batch PTE Spreadsheet Table 1B which also serves as a final equipment conflict check).

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3.2 Calculation of Methanol PTE

As indicated in Table 2A, methanol can be emitted from 7 reactors, 3 centrifuges, 1 thin film evaporator, 4 dryers, and 2 ion exchange units. Methanol is emitted in the production of 9 different products.

By reviewing that Batch Percent Utilization Spreadsheet, we can see that Product H is the largest emitter of methanol and requires 1 batch reactor (R-5) 50% of the time, 1 dryer (D-4) 50% of the time, and 1 centrifuge (C-4) 100% of the entire batch time. However, reactor R-5 and dryer D-4 can be run 100% of the time if both centrifuges C-4 and C-5 are used. The maximum methanol emissions for Product H would then be two (2) times the methanol emission rate for one train (2 x 3.2 = 6.4 TPY).

By making this worst case assumption, we have tied up reactor R-5, centrifuges C-4 and C-5, and dryer D-4 100% of the time. Therefore, no other process can be run or considered that requires this equipment. Consequently, by inspection of Table 2A, Product J can be eliminated because it uses centrifuges C4 and C5. Process J's use of reactor R-5 would not itself eliminate process J because reactor R-6B is interchangeable. Product L can be eliminated because it uses centrifuge C5. Products I and O can be eliminated because they both require centrifuge C-4.

The highest methanol emitter for remaining processes (Products E, K, M and N) is Process K which requires reactor R-1, centrifuge C-2 and dryer D-6. Including Process K in the PTE calculation eliminates Products M and N which, respectively, utilize reactor R-1 and dryer D-6.

The only remaining methanol emitter is Process E which uses reactor R-5. Since reactor R-6B is available, Process E is included in the total methanol PTE calculations. Therefore, the methanol potential to emit can be calculated by summing emissions from Processes E, H, and K and is equal to 1.0 + 6.4 + 1.9 or 9.3 TPY (Table II-B).

3.3 Calculation of Hexane PTE

As indicated in Table 3A, hexane can be emitted from 8 batch reactors, 2 batch centrifuges, 1 still, 1 thin film evaporator, and 3 dryers. Hexane is emitted in the production of 9 different products.

By reviewing that Batch Percent Utilization Spreadsheet, we can see that Product S is the largest emitter of hexane and requires reactor R-1 and centrifuge C-4 100% of the time. Therefore, no other process can be considered that requires this equipment. Consequently, Products D, I, L, Q, and R can be eliminated because they all use reactor R-1.

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By inspection, we can see that Product T is the next largest emitter of hexane and should be included in the total hexane PTE because it requires reactor R-6B 100% of the time. However, since reactor R-5 can also be used to produce Product T and there is "spare" capacity in both centrifuge C-5 and dryer D-1, an additional 13% of the time T can be run using reactor R-5. This limits out dryer D-1 at 100% of capacity. Therefore, dryer D-1 is at 94% utilization for Product T and centrifuge C-5 is at 33% utilization total (i.e., basic yearly batch x 1.13).

Product P is eliminated because there is 100 % utilization of dryer D-1 in making Products S and T. Since there is capacity in centrifuge C-5 to produce Product U concurrently with Products S and T, its emissions should be counted in the final hexane plant-wide PTE along with emissions from products S and T.

3.4 Calculation of Total HAP PTE

The total HAP PTE should be determined by first identifying the product with the largest (HAP) emission rate. In this case, Product S has the largest (HAP) emission rate (4.05 TPY of hexane) and fully utilizes reactors R-1 and centrifuge C-4. However, the third largest emitter of HAP is Product H which emits 3.2 TPY of methanol and which uses 50% of reactor R-5's, 100% of centrifuge C-4's, and 50% of dryer D-4's capacity. Product H's methanol emissions would be 6.4 TPY if reactor R-5, centrifuges C-4 and C-5, and dryer D-4 are run at 100% capacity. Since Product S's emissions are less than Product H's at full equipment utilization, Product H should be selected and Product S emissions should be eliminated from the worst case PTE calculation. Therefore, reactor R-5 and centrifuges C-4 and C-5, and dryer D-4 are fully utilized. Any product using any one of these pieces of equipment other than reactor R-5 can be eliminated from the total HAP PTE calculation (Products A, C, D, I, J, L, O, P, Q, S, T and U).

The second largest emitter of a HAP is Product G which can utilize reactor R-6B and which emits 3.92 TPY of toluene. Since there are no equipment conflicts, its HAP emissions will be included in the total plant-wide HAP PTE.

Products B (2.44 TPY toluene) and E (1.0 TPY methanol) are eliminated from the total HAP PTE calculation because they use reactors R-5 or R-6B, which are fully utilized to make Products G and H.

The next largest emitter of a HAP is Product K which emits 1.86 TPY of methanol and which fully utilizes reactor R-1 and dryer D-6. Since this equipment is not used to make Products G and H, Product K's emissions should be included in the total worst case HAP PTE calculation.

Products R is eliminated from the total HAP PTE calculation because it uses reactor R-1.

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Product M (10.55 TPY methanol) is eliminated because it uses reactor R-1.

Products F and N are eliminated because they use dryer D-6 which is tied up in the production of Product K.

Therefore, the total HAP PTE is 12.2 TPY and is determined by adding emissions from Products G (3.9 TPY toluene), Product H (6.4 TPY methanol), and Product K (1.86 TPY methanol).

Table IA							
PROCESSES WITH MAXIMUM TOLUENE EMISSIONS							
* R-5 and R-6B interchangeable; C-4 and C-5 interchangeable							
PRODUCT	A	B	C	D	E	F	G
AER (TPY)	0.11	2.44	0.67	1.35	1.84	0.56	3.92
EQUIPMENT	PERCENT UTILIZATION						
R-1		64.00		23.00			
R-3			44.00				
R-4		74.00					
*R-5	50.00			100.00	100.00		100.00
R-6A							
*R-6B	100.00	100.00					
R-7							
R-8		48.00					
R-12					24.00		
C-2							
*C-4	100.00		15.00	39.00			
*C-5	50.00						
S-1							
S-2							
S-4							
L-1		52.00	100.00		36.00		
D-1			44.00	16.00			
D-2	53.00						
D-4							
D-5							
D-6	50.00					100.00	
IE-1							
IE-2							

TABLE IB				
TOLUENE POTENTIAL TO EMIT (PTE)				
PRODUCT	G	C	F	TOTALS
EMISSIONS (TPY)	7.84	0.67	0.56	9.07
EQUIPMENT	PERCENT UTILIZATION			
R-5	100.00			100.00
R-6B	100.00			100.00
D-6			100.00	100.00
R-3		44.00		44.00
C-4		15.00		15.00
L-1		100.00		100.00
D-1		44.00		44.00

TABLE IIA									
PROCESSES WITH MAXIMUM METHANOL EMISSIONS									
* R-5 and R-6B are interchangeable; C-4 and C-5 are interchangeable									
PRODUCT	E	H	I	J	K	L	M	N	O
AER (TPY)	1	3.22	0.24	1.58	1.86	0.21	0.55	0.53	0.6
EQUIPMENT	PERCENT UTILIZATION								
R-1			57.00		100.00	82.00	43.00		65.00
R-3			100.00						
R-4									
*R-5	100.00	50.00		40.00		100.00			30.00
R-6A								20.00	
*R-6B						44.00			
R-7									
R-8							100.00		100.00
R-12	24.00			42.00		41.00			
C-2				83.00	33.00		71.00		15.00
*C-4		100.00	57.00	42.00					10.00
*C-5				42.00		47.00			
S-1									
S-2									
S-4									
L-1	36.00								
D-1				100.00		35.00	43.00		
D-2									
D-4		50.00							
D-5								72.00	
D-6			79.00		100.00			100.00	100.00
IE-1							67.00		90.00
IE-2									90.00

TABLE IIB				
METHANOL POTENTIAL TO EMIT (PTE)				
PRODUCT	H	K	E	TOTALS
EMISSIONS (TPY)	6.44	1.86	1.0	9.3
EQUIPMENT	PERCENT UTILIZATION			
R-1		100.00		100.00
R-5	100.00			100.00
R-6B			100.00	100.00
R-12			24.00	24.00
C-2		33.00		33.00
C-4	100.00			100.00
C-5	100.00			100.00
D-4	100.00			100.00
D-6		100.00		100.00
L-1			36.00	36.00

TABLE IIIA									
PROCESSES WITH MAXIMUM HEXANE EMISSIONS									
* R-5 and R-6B are interchangeable; C-4 and C-5 are interchangeable.									
PRODUCT	D	I	L	P	Q	R	S	T	U
AER (TPY)	2.13	0.73	1.83	0.59	1.2	1.02	4.05	3	0.33
EQUIPMENT	PERCENT UTILIZATION								
R-1	23.00	57.00	82.00		100.00	92.00	100.00		
R-3		100.00			45.00	92.00	70.00		
R-4				38.00	9.00				
*R-5	100.00		100.00				57.00		
R-6A									
*R-6B			44.00					100.00	
R-7									
R-8					9.00				100.00
R-12			41.00			100.00			
C-2									
*C-4	39.00	57.00		100.00	44.00		100.00	29.00	48.00
*C-5			47.00				14.00		
S-1						92.00			
S-2									
S-4									
L-1						92.00			
D-1	16.00		35.00	100.00			6.00	83.00	
D-2									
D-4									91.00
D-5									
D-6		79.00			12.00				
IE-1									
IE-2									

TABLE IIIB				
HEXANE POTENTIAL TO EMIT				
PRODUCT	S	T	U	TOTALS
EMISSIONS (TPY)	4.05	3.4	0.33	7.8
EQUIPMENT	PERCENT UTILIZATION			
R-1	100.00			100.00
R-3	70.00			70.00
R-5	57.00	13.00		70.00
R-6B		100.00		100.00
R-7				
R-8			100.00	100.00
C-4	100.00			100.00
C-5	14.00	33.00	48.00	95.00
D-1	6.00	94.00		100.00
D-4			91.00	91.00

TABLE IV				
TOTAL HAP POTENTIAL TO EMIT				
PRODUCT	H	G	K	TOTALS
EMISSIONS (TPY)	6.44	3.92	1.86	12.22
EQUIPMENT	PERCENT UTILIZATION			
R-1			100.00	100.00
R-3				
R-4				
R-5	100.00			100.00
R-6A				
R-6B		100.00		100.00
R-7				
R-8				
R-12				
C-2			33.00	33.00
C-4	100.00			100.00
C-5	100.00			100.00
S-1				
S-2				
S-4				
L-1				
D-1				
D-2				
D-4	100.00			100.00
D-5				
D-6			100.00	100.00
IE-1				
IE-2				

APPENDIX 8

TYPICAL SOCMA BATCH SHEET

Product: Product H dried — Part No: 4008001
From: Material 1 — Part No: 1068500
MW Product: 300.00 — Basis: 1470.0 Kg — Packet Revision Date: 8/19/91
MW RAW: 100 — Yield: 70.00 %

Part No.	Compound	FW	Sp. Gr.	Moles	kg.	kg./ba	Gal/ba	Price $/kg	Unit Cost $/kg	Recovery %	Credit $/kg
1068500	Material 1	100.00	1.635	1.00	1.0000	700.0	113.1	1.958	0.932		
1088400	Acid 2	50.00	1.500		0.4836	338.5	59.6	0.650	0.150		
1025250	Material 3	150.00	3.119		1.3907	973.5	82.5	3.250	2.152		
1133100	Methanol (tank)	32.07	0.791		6.0393	4227.5	1412.0	0.225	0.647		
1023250	Material 4	100.00	0.931		4.8008	3360.5	905.1	5.100	11.859		
1234000	Water	18.02	1.000		2.7844	1949.1	514.9	0.000	0.000		
1088500	Acid 5	50.00	1.159		1.5031	1052.2	239.8	0.163	0.117		
1196800	Base 6	50.00	1.530		0.1021	71.5	12.3	0.340	0.017		
1133100	Methanol (tank)	32.07	0.791		1.8742	1311.9	438.2	0.225	0.201		
1011750	Acetone (tank)	58.08	0.787		1.8742	1311.9	440.4	0.750	0.705		
4008001	Product H dried	300.00		0.70	2.1000	1470.0	3,889.4		18.580		

BATCH RAW$ = $24,372

Container Charge	
Part No:	1900000
	No Package
Cost/Container:	$0.00
Capacity (kg):	1
Unit Cost/ Kg.:	0.000

Part # — Value

Manufacturing Cost Consolidation: GHR Rate = 54.00 $/GHr

Step	Intermediate	Equip	Alternate Equip	Cycle Hr.	Equip Factor	GHr GHr/Ba	Unit Cycle Hr/Kg	Unit Cost $/Kg	Stream	Quant. Lit./Ba	Unit Quant. Lit./Kg	Hazard. Cost $/Liter	Unit Cost $/Kg
A	Reaction	R-5	R-6b	120	1.400	168.00	0.082	6.171					
	Centrifugation	C-5	C-4	240	0.300	72.00	0.153	2.845					
	Drying	D-4		120	0.400	48.00	0.082	1.783					
					GHr =	288.00 GHr/Ba							

Batch LOH = $15,552

Overhead ($/Kg)	10.580
Raws ($/Kg)	18.580
Raws recovery credit	
Containers ($/Kg)	0.000
GMC ($/Kg)	27.159

Key Raws = 100.000 %RM's
Real Raws = 18.580 / kg.

APPROVED FOR USE
Date: _____

Accounting — Process Devel.
Production — Gn. Mgr.

Prepared by: _____
Date: _____

84DBA1.XLS

Product: Product H — Part No: 5008001
From: Product H dried — Part No: 4008001
MW Product: 300.00 — Basis: 1462.7 Kg — Packet Revision Date: 9/18/91
MW RAW: 300.00 — Yield: 89.50 %

Part No.	Compound	FW	Sp. Gr.	Moles	kg.	kg./ba	Gal/ba	Price $/kg	Unit Cost $/kg	Recovery %	Credit $/kg
4008001	Product H dried	300.00	1.000	1.00	1.0000	1470.0	388.4	27.159	27.286		
5008001	Product H	300.00		1.00	0.8950	1462.7	388.4		27.286		
							BATCH RAWS =		$39,924		

Container Charge	
Type:	1906RTF
	30 gallon Plastic Drum
Cost/Container:	$11.64
Capacity (kg):	50
Unit Cost/ Kg.:	0.233

Manufacturing Cost Consolidation: GHR Rate = 54.00 $/GHr

Step	Intermediate	Equip	Cycle Hr.	Equip Factor	GHr GHr/Ba	Unit Cycle Hr/Kg	Unit Cost $/Kg	Stream	Quant. Lit./Ba	Unit Quant. Lit./Kg	Hazard. Cost $/Liter	Part #	Unit Cost $/Kg	Value
5	Grinding	FG	4	0.200	0.80	0.003	0.030							
	Sifting	FS	24	0.200	4.80	0.015	0.177							
				GHr =	5.60 GHr/Ba									

Batch LOH = $302

Overhead ($/Kg)	0.207
Raws ($/Kg)	27.286
Raws recovery credit	
Containers ($/Kg)	0.233
GMC ($/Kg)	27.735

Key Raws = 51.048 %RM's
Real Raws = 16.663 / kg.

APPROVED FOR USE
Date: _____

Accounting | Process Devel.
Production | Gn. Mgr.

Prepared by: _____
Date: _____

Table IA							
PROCESSES WITH MAXIMUM TOLUENE EMISSIONS							
* R-5 and R-6B interchangeable; C-4 and C-5 interchangeable							
PRODUCT	A	B	C	D	E	F	G
AER (TPY)	0.11	2.44	0.67	1.35	1.84	0.56	3.92
EQUIPMENT	PERCENT UTILIZATION						
R-1		64.00		23.00			
R-3			44.00				
R-4		74.00					
*R-5	50.00			100.00	100.00		100.00
R-6A							
*R-6B	100.00	100.00					
R-7							
R-8		48.00					
R-12					24.00		
C-2							
*C-4	100.00		15.00	39.00			
*C-5	50.00						
S-1							
S-2							
S-4							
L-1		52.00	100.00		36.00		
D-1			44.00	16.00			
D-2	53.00						
D-4							
D-5							
D-6	50.00					100.00	
IE-1							
IE-2							

TABLE IB				
TOLUENE POTENTIAL TO EMIT (PTE)				
PRODUCT	G	C	F	TOTALS
EMISSIONS (TPY)	7.84	0.67	0.56	9.07
EQUIPMENT	PERCENT UTILIZATION			
R-5	100.00			100.00
R-6B	100.00			100.00
D-6			100.00	100.00
R-3		44.00		44.00
C-4		15.00		15.00
L-1		100.00		100.00
D-1		44.00		44.00

TABLE IIA									
PROCESSES WITH MAXIMUM METHANOL EMISSIONS									
* R-5 and R-6B are interchangeable; C-4 and C-5 are interchangeable									
PRODUCT	E	H	I	J	K	L	M	N	O
AER (TPY)	1	3.22	0.24	1.58	1.86	0.21	0.55	0.53	0.6
EQUIPMENT	PERCENT UTILIZATION								
R-1			57.00		100.00	82.00	43.00		65.00
R-3			100.00						
R-4									
*R-5	100.00	50.00		40.00		100.00			30.00
R-6A								20.00	
*R-6B						44.00			
R-7									
R-8							100.00		100.00
R-12	24.00			42.00		41.00			
C-2				83.00	33.00		71.00		15.00
*C-4		100.00	57.00	42.00					10.00
*C-5				42.00		47.00			
S-1									
S-2									
S-4									
L-1	36.00								
D-1				100.00		35.00	43.00		
D-2									
D-4		50.00							
D-5								72.00	
D-6			79.00		100.00			100.00	100.00
IE-1							67.00		90.00
IE-2									90.00

TABLE IIB				
METHANOL POTENTIAL TO EMIT (PTE)				
PRODUCT	H	K	E	TOTALS
EMISSIONS (TPY)	6.44	1.86	1.0	9.3
EQUIPMENT	PERCENT UTILIZATION			
R-1		100.00		100.00
R-5	100.00			100.00
R-6B			100.00	100.00
R-12			24.00	24.00
C-2		33.00		33.00
C-4	100.00			100.00
C-5	100.00			100.00
D-4	100.00			100.00
D-6		100.00		100.00
L-1			36.00	36.00

TABLE IIIA									
PROCESSES WITH MAXIMUM HEXANE EMISSIONS									
* R-5 and R-6B are interchangeable; C-4 and C-5 are interchangeable.									
PRODUCT	D	I	L	P	Q	R	S	T	U
AER (TPY)	2.13	0.73	1.83	0.59	1.2	1.02	4.05	3	0.33
EQUIPMENT	PERCENT UTILIZATION								
R-1	23.00	57.00	82.00		100.00	92.00	100.00		
R-3		100.00			45.00	92.00	70.00		
R-4				38.00	9.00				
*R-5	100.00		100.00				57.00		
R-6A									
*R-6B			44.00					100.00	
R-7									
R-8					9.00				100.00
R-12			41.00			100.00			
C-2									
*C-4	39.00	57.00		100.00	44.00		100.00	29.00	48.00
*C-5			47.00				14.00		
S-1						92.00			
S-2									
S-4									
L-1						92.00			
D-1	16.00		35.00	100.00			6.00	83.00	
D-2									
D-4									91.00
D-5									
D-6		79.00			12.00				
IE-1									
IE-2									

TABLE IIIB				
HEXANE POTENTIAL TO EMIT				
PRODUCT	S	T	U	TOTALS
EMISSIONS (TPY)	4.05	3.4	0.33	7.8
EQUIPMENT	PERCENT UTILIZATION			
R-1	100.00			100.00
R-3	70.00			70.00
R-5	57.00	13.00		70.00
R-6B		100.00		100.00
R-7				
R-8			100.00	100.00
C-4	100.00			100.00
C-5	14.00	33.00	48.00	95.00
D-1	6.00	94.00		100.00
D-4			91.00	91.00

TABLE IV				
TOTAL HAP POTENTIAL TO EMIT				
PRODUCT	H	G	K	TOTALS
EMISSIONS (TPY)	6.44	3.92	1.86	12.22
EQUIPMENT	PERCENT UTILIZATION			
R-1			100.00	100.00
R-3				
R-4				
R-5	100.00			100.00
R-6A				
R-6B		100.00		100.00
R-7				
R-8				
R-12				
C-2			33.00	33.00
C-4	100.00			100.00
C-5	100.00			100.00
S-1				
S-2				
S-4				
L-1				
D-1				
D-2				
D-4	100.00			100.00
D-5				
D-6			100.00	100.00
IE-1				
IE-2				

OhioEPA
State of Ohio Environmental Protection Agency

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(614) 644-3020
FAX (614) 644-2329

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To R. Hodanbosi	From B. Bonds
Co. DAPC	Co. DSIWM
Dept.	Phone #
Fax #	Fax #

INTEROFFICE COMMUNICATION

TO: Robert Hodanbosi, Chief, DAPC

FROM: Barbara Bonds, Chief, DSIWM

DATE: January 13, 1993

SUBJECT: January 15 Meeting

Thanks for agreeing to meet with Alison and I on January 15 at 9:00 in your office. The two issues of primary concern to us are (1) requiring air permits for all autoclaves (steam emissions) and (2) communicating air permit submittal/decisions to DSIWM in a timely manner. Further background is provided below.

AIR PERMIT REQUIREMENTS FOR AUTOCLAVES

An interoffice communication dated December 10, 1992 and sent to Alison Shockley of my staff by Dana Thompson of your staff has been brought to my attention. The subject of the memorandum is consistency in the permit conditions for autoclaves. Based upon the contents of the memo versus past practice, the memo does not reflect past practices. It requires permits for all autoclaves, large and small. It was my understanding from our conversation of October 26, 1992 at the chiefs meeting that the subject of air permit requirements for autoclaves (large and small) was before you for your consideration. DSIWM would like to discuss the November 9, 1992 memorandum with you regarding the permitting of autoclaves to help us understand why you want every autoclave within the State of Ohio to be an air source.

COMMUNICATION BETWEEN DAPC AND DSIWM

I am also aware that several infectious waste incinerator, alternative solid waste treatment (e.g. soil burners, waste distillation units), and construction and demolition debris facility PTIs have been issued since my IOC of April 30, 1992 to you regarding the need to share information about permit applications. Unfortunately, DSIWM did not learn about the majority of these air permits from DAPC. DAPC has not resolved the communication issues outlined in my memorandum. As a result, DSIWM often remains in the dark regarding submitted and/or newly issued permits for these types of facilities. This puts us at a great disadvantage since we get lots of calls regarding permit requirements and general regulatory questions for solid and infectious waste facilities. We need to work together and coordinate on air/infectious waste permits, especially since we do a large portion of answering the public's questions at your

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air infectious/solid waste permit public meetings. If we do not know about the submittal of the air PTI and the basic information about the application is not shared with us in a timely manner, we are caught by surprise and sent scrambling in order to be any help at your public meetings or with telephone inquires. This is not an efficient use of our time and scarce resources.

Additionally, our inspectors are required to inspect infectious waste incinerators and autoclaves and licensed solid waste facilities a minimum of quarterly, regardless of whether the site is required to have a solid waste or infectious waste PTI. Information gathered from our inspections could be of great use to DAPC in monitoring the compliance of a facility. For example, DSIWM facility records and staff time are currently being utilized to assist the Attorney General's Office in the appeal of one of your PTO's, which dramatizes even further the need and benefits of effective communication.

I trust we can resolve the communication gap immediately, but, if I don't see noticeable improvement, please note that my DSIWM staff statewide will no longer be available to participate in public meetings regarding infectious waste or solid waste air permits until effective communication between the divisions is established. Please refer to my suggested approaches to resolve the communication issue outlined in my memo to you dated 4/30/92 for Friday's discussion.

I trust that our meeting on January 15, 1993 will result in a game plan to resolve our two issues.

AMS/BB/clk

cc: Jenny Tiell, Acting Deputy Director
Pat Madigan, PIC

OhioEPA
State of Ohio Environmental Protection Agency

P.O. Box 1049, 1800 WaterMark Dr.
Columbus, Ohio 43266-0149
(614) 644-3020
FAX (614) 644-2329

George V. Voinovich
Governor

Donald R. Schregardus
Director

INTEROFFICE COMMUNICATION

TO: Bob Hodanbosi, Chief, DAPC

FROM: Barbara Bonds, Chief, DSIWM

DATE: November 10, 1992

SUBJECT: Permit Requirements for Autoclaves

It has been brought to my attention by my staff that the Division of Air Pollution Control has revised its current position that no permits are needed for autoclaves. It is my staff's understanding from speaking with your staff that DAPC's new position is that autoclaves are an air emissions source and therefore are included in the permitting process. Specifically, autoclaves such as the San-I-Pak unit at St Vincent Medical Center in Toledo need a permit-to-install and a permit-to-operate to be in compliance. Note that Lake Hospital Systems East and West already have operational San-I-Pak units and were not required to complete DAPC's permitting process.

Given DAPC's new position on autoclaves, are all autoclaves required to complete the permitting process? Before you answer, consider the following: 1) all of the following types of facilities would need to complete the DAPC permitting process for autoclaves: all universities, all hospitals, dental offices, veterinary offices, physician offices, urgent care facilities, zoos, reference laboratories, skilled care facilities, prisons, coroner's offices, and health departments. 2) It is also my understanding that when my staff questioned your staff regarding the scientific basis for such a change in position and no evidence was offered. Is there new scientific literature that we should be aware of regarding emissions, other than steam, from an autoclave?

Before you finalize such a change in position for autoclaves, please call so we can discuss this issue further. This meeting would be a good time to talk about my communication of April 30, 1992 to you regarding the coordination and notification of infectious waste permitting efforts (copy attached).

BB/AMS/clk

Attachment

cc: Jenny Tiell, Acting Deputy Director
Alison Shockley, DSIWM

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JAN 13 '93 11:19

£7 OhioEPA
State of Ohio Environmental Protection Agency

P.O. Box 1049, 1800 WaterMark Dr.
Columbus, Ohio 43266-0149
(614) 644-3020
FAX (614) 644-2329

George V. Voinovic
Governc

Donald R. Schregardu
Directc

INTEROFFICE COMMUNICATION

TO: Bob Hodanbosi, Assistant Chief, DAPC

FROM: Barbara Bonds, Acting Chief, DSIWM

DATE: April 30, 1992

SUBJECT: Permit Tracking and Notification

In an effort to coordinate joint solid waste-infectious waste/air permitting activities and notification of infectious waste air permitting activities between the two divisions, as agreed to at our April 6, 1992 meeting, I suggest the following:

- all solid waste facility and infectious waste treatment facility permits are classified as controversial
- tracking logs (like the one attached) of all controversial air permits be sent to me monthly beginning in June
- tracking logs of all solid waste and infectious waste permits be sent to you monthly beginning in June

With this information DSIWM can coordinate with you on which air permits need to be issued jointly with DSIWM and which can be issued solely by DAPC. Please contact me to discuss further. Thanks.

BB/jm

cc: Jenny Tiell, Acting Deputy Director
Pat Walling, DAPC
Ed Brdicka, DSIWM
Alison Shockley, DSIWM

attachments

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OEPA inter-office communication

to: DISTRIBUTION date: September 18, 1998

from: Misty Parsons through Mike Hopkins, AQM&P

subject: Permitting Landfills with gas control systems (flares)

Several staff have asked questions about permitting landfills and their gas control systems, most often flares. Our NSR group has considered this topic, and we have created this guidance in response. We are proposing this as a Draft for your comments. Please submit any comments by October 9, 1998. If after reading this, any of you have further questions, please contact us.

PTIs for the control system/flare
Remember that the landfill is the source, not the flare. For new landfills, a PTI is required for fugitive PM and for OC emissions that will be generated. The PTI should include requirements and limits for both.

When an old landfill adds a flare, this results in new pollutants, and it could be a modification under the PTI rule (unless determined to be environmentally beneficial or OAC 3745-76-02 exempt - see below). When a modified PTI is needed, you would repeat everything from the current PTI (such as fugitive PM allowables, asbestos restrictions, etc.), plus add the flare system and it's requirements.

Then is a PTI needed related to addition of a flare?
There are several situations that require us to evaluate whether a PTI is needed for the flare. The attached flow chart explains this further. First, all landfills installed after January 1974 should have obtained a PTI for the disposal activities (fugitive dust), asbestos, roads and parking areas and any storage piles (with exceptions - see flow chart). If a landfill has not obtained a PTI for the above activities and one is required, we would include the flare in that PTI. Below are the common situations involving flares:

- A landfill installed post-1974 has a PTI for disposal activities (dust), but we did not include any evaluation of OC/NMOC emissions or any allowable for this. However, either NSPS WWW or OAC 3745-76 require the installation of the flare at some point.

  NSPS WWW: After reviewing the PTI modify definition (MM), we believe that adding a flare to an OC source is a physical change or change in the method of operation, which results in the emission of new air pollutants not emitted before. If these emissions (NOx, CO, etc.) exceed the De Minimis level, then a PTI is required (see rule). However, under the rule there is a Director's exemption for environmentally beneficial projects. So the landfill can submit a letter requesting an environmentally beneficial determination.

  We will normally consider flares to be environmentally beneficial projects, however, these requests will be evaluated on a case-by-case basis. This is the process. The landfill submits a request to the FO with information about the flare and its emissions, including any

needed modeling, the FO reviews this, and then drafts a letter for the Director's signature. This package is submitted to AQM&P for review, and we will get the Director's signature on the reply letter.

Chapter 76: Rule 76-02 automatically exempts sources that are making changes to comply with that rule, from the PTI requirement. So it's automatically exempt from the PTI, so no environmentally beneficial exemption letter is needed.

- A landfill installed post-1974 has a PTI for disposal activities (dust), but we did not include any evaluation of OC/NMOC emissions or any allowable for this. If there is no rule requirement for the landfill to install a flare, and they do not wish to, nothing is triggering the PTI requirement.

Which Pollutants get Allowables
You should set allowables for the criteria/NAAQS pollutants, and include both NMOC and Methane allowable limits. A lbs/hr and TPY is needed for all these pollutants, except that we will have just a TPY number for NMOC and methane. Do not routinely set allowables for any air toxics.

Emission Factors
To develop PTI calculations and limits, you would normally use the Landfill Air Emissions Estimation Model to do this, however this gives you several choices. We believe the AP-42 factors provide the most representative numbers, so use AP-42 for all pollutants.

However, you may also rely on manufacturers numbers for pollutants other than NMOC and methane, as long as you believe they are accurate. You would probably use the program for NMOCs, unless the company wants to discuss using a different way to calculate emissions. The computer program allows you to enter other numbers. And the applicant may submit their calculations based upon sampling they have done or other methods. You need to determine if they are valid.

The program calculates the uncontrolled tons/year emissions expected year-by-year as refuse is added. Decomposition begins to generate OC, and emissions increase as the years go by. For allowables, you would have both NMOC and methane. The flare reduces NMOC by 98%. We expect methane would also be reduced by 98%, so you can use that factor, but this may also be something for further research. You can calculate the controlled emissions: uncontrolled x 0.02 (the 98% efficient flare).

Max Emissions, Allowables and PSD/NSR
For a new landfill, you need to consider the projected uncontrolled emissions, in TPY, that will occur before they put on the flare or control system. These uncontrolled emissions are often higher than the highest year with the flare operating. You need to know when the flare will be installed/operated, to know what the highest uncontrolled rate will be prior to that time. Set the NMOC TPY allowable at the worst-case or highest emissions point (which could either be the highest uncontrolled emissions, or max emissions years later with the flare).

When you have the max TPY emissions, you can determine if they trigger PSD review. If so, they may be able to avoid PSD by putting on the flare sooner, unless max controlled emissions exceed PSD levels. Any that need the flare sooner than the rules require (in order to avoid PSD) would need

a federally enforceable term that says something like, when X amount of refuse is in place, the flare must be in operation.

ir Toxics
Any air toxics which are NMOCs are regulated by NSPS, and we will consider NSPS control to be current BAT. So any NMOCs that are listed toxics do not require modeling. Any other listed toxics that are not NMOCs, such as HCL or Vinyl Chloride, should get toxics modeling if over 1 TPY in amount, per the Toxics policy. We have decided that, since there is no TLV listed for methane in the ACGIH booklet, it should not be modeled for air toxics.

It seems most landfills will have HCl emissions. So you need to estimate the amount, and see if modeling is needed. If the source does not know what type of control they will use, and therefore doesn't have the stack data, they can still receive the PTI, and model at a later time as soon as they have the stack data. Place a term in the PTI requiring compliant modeling when the parameters are known. As always when toxics is required in a PTI, you would state "Compliance with the Air Toxics Policy" under BAT.

Testing
Test for NMOC and any others that the FO permit writer feels are necessary.

Emissions Unit Number
The types of sources needing permits and the unit numbers are as follows:

P901*	Landfill Operations (disposal activities, asbestos and possible flair)
F001	Material Storage Piles (for any earth placed in a pile from the landfill)
F002	Roadways and Parking Areas
G001	Gasoline/Diesel Dispensing (if applicable)

* This reflects the fact that it has fugitive emissions from the disposal operations, as well as the flare emissions.

Landfill Rules
Be sure to check the NSPS WWW and new state rules to determine which apply, and cite the appropriate one. WWW is for new or modified landfills after May 30, 1991, and 3745-76 is for landfills existing before that date. Harry Judson works with the landfill regulations, and you can contact him for assistance when needed.

Chapter 17 and a VE limit
Tom Kalman is currently determining whether any rules apply, so we will know whether to cite and check compliance with them during review. However, we believe that BAT should be 20% opacity, just as it is stated in the rule.

Compliance Methods
The compliance methods for the emissions limits would probably be emission factor calculation, using the model, unless testing is being required.

Controls other than Flares
Some landfills will propose other types of controls allowed by NSPS and Ch. 76, like engines. And a new landfill not expecting to install control for some time may not know what they will want to do in the future. But you

need to somehow write it into the PTI. In that case, use the worst case of the options they are planning on, and write an explanation into the terms. For emissions limits, as an example, for CO and NOx, you would run the calculation of emissions from an engine and a flare, and take whichever is worst as your allowable (explain the basis in the PTI).

Controls owned/operated by a second party
We have also seen cases where someone other than the landfill will own and operate the control system, perhaps to generate power. In that case, the air contaminant source owner (the second party) must obtain a PTI for this equipment. [The gas collection system would still be the landfills.] We would not cite the NSPS or Ch. 76 rule in their PTI (since we believe it pertains to the landfill owner), but we would require them to meet the 98% efficiency requirement, or whatever rule requirements there are for that system. They must comply so the landfill will comply.

If you have any questions or comments, please contact your CO NSR contact here in AQM&P or Mike Hopkins at (614) 644-2270. Thank you.

DISTRIBUTION

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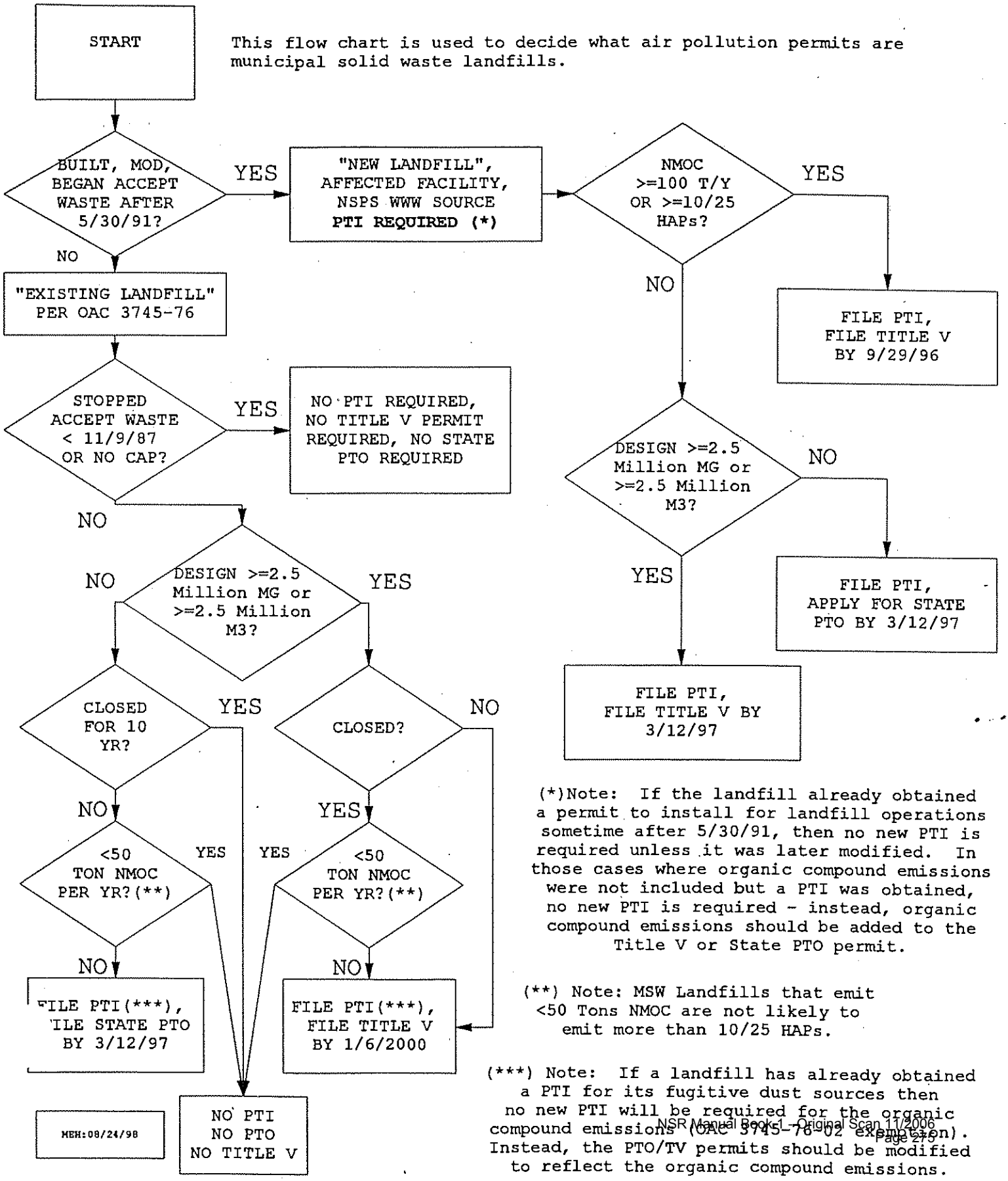
Mike Ahern, PMU		

MH/MP

MUNICIPAL SOLID WASTE LANDFILL AIR POLLUTION PERMIT TO INSTALL/OPERATE/TITLE V REQUIREMENTS

This flow chart is used to decide what air pollution permits are municipal solid waste landfills.



(*)Note: If the landfill already obtained a permit to install for landfill operations sometime after 5/30/91, then no new PTI is required unless it was later modified. In those cases where organic compound emissions were not included but a PTI was obtained, no new PTI is required - instead, organic compound emissions should be added to the Title V or State PTO permit.

(**) Note: MSW Landfills that emit <50 Tons NMOC are not likely to emit more than 10/25 HAPs.

(***) Note: If a landfill has already obtained a PTI for its fugitive dust sources then no new PTI will be required for the organic compound emissions (OAC 3745-78-02 exemption). Instead, the PTO/TV permits should be modified to reflect the organic compound emissions.

OHIO EPA
INTER-OFFICE COMMMUNICATION

June 20, 1996
To: Locals and District
From: Harry Judson, DAPC/CO

Subject: **Air requirements for municipal waste landfills**

New federal rules (FR March 12, 1996), soon to be State rules, affecting both new municipal solid waste landfills (NSPS) and existing landfills, require the control of NMOC from the following:

- New landfills built after May 30, 1991 and having a design capacity greater than 2.5 million Mg or 2.5 million cubic meters and calculated NMOC emissions greater than 50 Mg/year have five years to install a gas collection system to reduce NMOC emissions by 98%.

- Existing landfills which have accepted waste since November 8, 1987 and have a design capacity greater than 2.5 million Mg or 2.5 million cubic meters and calculated NMOC emissions greater than 50 Mg/year also are required to reduce NMOC emissions by 98%.

Under the new rules, all landfills are required by June 10, 1996 to provide Ohio EPA with their design capacity and an estimate of their NMOC emissions. If their emissions are greater than 50 Mg/year, the following implementation schedules must be meet:

- For new landfills, a collection and control system design plan must be submitted within 12 months (6/10/97). Installation of the system must be completed by 12/10/98.
- For existing landfills, installation of a collection and control system must be accomplished 30 months after an approved State rule.

Within the next several weeks, Ohio EPA will be providing the Locals and Districts with a policy on whether landfills can obtain a Federally Enforceable State Operating Permit (FESOP).

Affected landfills are being identified by the District's Solid and Infectious Waste Divisions so that notification and compliance can be assured.

A copy of the new rule is enclosed.

If you have any questions regarding this rule please contact Harry Judson at (614) 644-3612.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
RESEARCH TRIANGLE PARK, NC 27711

October 21, 1994

OFFICE OF
AIR QUALITY PLANNING
AND STANDARDS

RECEIVED
OCT 27 1994
REGULATION DEVELOPMENT BRANCH
U.S. EPA, REGION V

MEMORANDUM

SUBJECT: Classification of Emissions from Landfills for NSR Applicability Purposes

FROM: John S. Seitz, Director
Office of Air Quality Planning and Standards (MD-10)

TO: Director, Air, Pesticides and Toxics Management Division, Regions I and IV
Director, Air and Waste Management Division, Region II
Director, Air, Radiation and Toxics Division, Region III
Director, Air and Radiation Division, Region V
Director, Air, Pesticides and Toxics Division, Region VI
Director, Air and Toxics Division, Regions VII, VIII, IX and X

The EPA has recently received several inquiries regarding the treatment of emissions from landfills for purposes of major NSR applicability. The specific issue raised is whether the Agency still considers landfill gas emissions which are not collected to be fugitive for NSR applicability purposes.

The EPA's NSR regulations define "fugitive emissions" to mean "those emissions which could not reasonably pass through a stack, chimney, vent, or other functionally-equivalent opening" (40 CFR 51.165(a)(1)(x)). In general, where a facility is not subject to national standards requiring collection, the technical question of whether the emissions at a particular site could "reasonably pass through a stack, chimney, vent, or other functionally-equivalent opening" is a factual determination to be

made by the permitting authority, on a case-by-case basis. In determining whether emissions could reasonably be collected (or if any emissions source could reasonably pass through a stack, etc.), "reasonableness" should be construed broadly. The existence of collection technology in use by other sources in the source category creates a presumption that collection is reasonable. Furthermore, in certain circumstances, the collection of emissions from a specific pollutant emitting activity can create a presumption that collection is reasonable for a similar pollutant-emitting activity, even if that activity is located within a different source category.

In 1987, EPA addressed whether landfill gas emissions should be considered as fugitive.[1] The Agency explained that for landfills constructed or proposed to be constructed with gas collection systems, the collected landfill gas would not qualify as fugitive. Also, the Agency understood at the time that, with some exceptions, landfills were not constructed with such gas collection systems. The EPA explained that "[t]he preamble to the 1980 NSR regulations characterizes nonfugitive emissions as '. . . emissions which would ordinarily be collected and discharged through stacks or other functionally equivalent openings'" (see 45 FR 52693, Aug. 7, 1980).[2] Based on the "understanding that landfills are not ordinarily constructed with gas collection systems," the Agency concluded that "emissions from existing or proposed landfills without gas collection systems are to be considered fugitive emissions." The Agency also made clear, however, that the applicant's decision on whether to collect emissions is not the deciding factor. Rather, it is the reviewing authority that makes the decision regarding

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[1]See memorandum entitled "Emissions from Landfills," from Gerald A. Emison, Director, Office of Air Quality Planning and Standards, to David P. Howekamp, Director, Air Management Division, Region IX, dated October 6, 1987 (attached). It is important to note that the interpretation contained in this memorandum was only applicable to landfills.

[2]In fact, the 1980 preamble language recognized the concern that sources could avoid NSR by calling emissions fugitives, even if the source could capture those emissions. The EPA's originally-proposed definition of fugitive emissions was changed in the final 1980 regulations to "ensure that sources will not discharge as fugitive emissions those emissions which would ordinarily be collected and discharged through stacks or other functionally equivalent openings, and will eliminate disincentives for the construction of ductwork and stacks for the collection of emissions." Id.

which emissions can reasonably be collected and therefore not considered fugitive.

The EPA believes its 1987 interpretation of the 1980 preamble may have been misunderstood, and in any case that its factual conclusions at that time are now outdated. Continued misunderstanding or application of this outdated view could discourage those constructing new landfills from utilizing otherwise environmentally- or economically-desirable gas collection and mitigation measures in order to avoid major NSR applicability.

Specifically with regard to landfill gas emissions, gas collection and mitigation technologies have evolved significantly since 1987, and use of these systems has become much more common. Increasingly, landfills are constructed or retrofitted with gas collection systems for purposes of energy recovery and in order to comply with State and Federal regulatory requirements designed to address public health and welfare concerns. In addition, EPA has proposed performance standards for new landfills under section 111(b) of the Clean Air Act and has proposed guidelines for existing landfills under section 111(d) that, when promulgated, will require gas collection systems for existing and new landfills that are above a certain size and gas production level (see 56 FR 24468, May 30, 1991). Under these requirements, EPA estimates that between 500 and 700 medium and large landfills will have to collect and control landfill gas. The EPA believes this proposal created a presumption at that time that the proposed gas collection systems, at a minimum, are reasonable for landfills that would be subject to such control under the proposal.

Thus, EPA believes it is no longer appropriate to conclude generally that landfill gas could not reasonably be collected at a proposed landfill project that does not include a gas collection system. The fact that a proposed landfill project does not include a collection system in its proposed design is not determinative of whether emissions from a landfill are fugitive. To quantify the amount of landfill gas which could otherwise be collected at a proposed landfill for NSR applicability purposes, the air pollution control authority should assume the use of a collection system which has been designed to maximize, to the greatest extent possible, the capture of air pollutants from the landfill.

In summary, the use of collection technology by other landfill sources, whether or not subject to EPA's proposed requirements or to State implementation plan or permit requirements, creates a presumption that collection of the emissions is reasonable at other similar sources. If such a system can reasonably be designed to collect the landfill's gas

emissions, then the emissions are not fugitive and should be considered in determining whether a major NSR permit is required.

Today's guidance is applicable to the construction of a new landfill or the expansion of an existing landfill beyond its currently-permitted capacity. To avoid any confusion regarding the applicability of major NSR to existing landfills, EPA does not plan to reconsider or recommend that States reconsider the major NSR status of any existing landfill based on the issues discussed in this memorandum. Also, nothing in this guidance voids or creates an exclusion from any otherwise applicable requirement under the Clean Air Act and the State implementation plan, including minor source review.

The Regional Offices should send this memorandum, including the attachment, to States within their jurisdiction. Questions concerning specific issues and cases should be directed to the appropriate Regional Office. Regional Office staff may contact Mr. David Solomon, Chief, New Source Review Section, at (919) 541-5375, if they have any questions.

Attachment

cc: Air Branch Chief, Regions I-X
NSR Contacts, Regions I-X and Headquarters

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Office of Air Quality Planning and Standards
Research Triangle Park, North Carolina 27711

OCT 6 1987

MEMORANDUM

SUBJECT: Emissions from Landfills

FROM: Gerald A. Emison, Director
Office of Air Quality Planning and Standards (MD-10)

TO: David P. Howekamp, Director
Air Management Division, Region IX

This is in response to your September 1, 1987, memorandum requesting clarification regarding how landfill emissions should be considered for the purpose of determining nonattainment new source review (NSR) applicability under 40 CFR 51.18.

As you are aware, a landfill is subject to NSR if its potential to emit, excluding fugitive emissions, exceeds the 100 tons per year applicable major source cutoff for the pollutant for which the area is nonattainment. Fugitive emissions are defined in 40 CFR (j)(1)(ix) as ". . . those emissions which could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening." Landfill emissions that could reasonably be collected and vented are therefore not considered fugitive emissions and must be included in calculating a source's potential to emit.

For various reasons (e.g., odor and public health concerns, local regulatory requirements, economic incentives), many landfills are constructed with gas collection systems. Collected landfill gas may be flared, vented to the atmosphere, or processed into useful energy end products such as high-Btu gas, steam, or electricity. In these cases, for either an existing or proposed landfill, it is clear that the collected landfill gas does <u>not</u> qualify as fugitive emissions and must be included in the source's potential to emit when calculating NSR applicability.

The preamble to the 1980 NSR regulations characterizes nonfugitive emissions as ". . . those emissions which would ordinarily be collected and discharged through stacks or other functionally equivalent openings." Although there are some exceptions, it is our understanding that landfills are not ordinarily constructed with gas collection systems. Therefore, emissions from existing or proposed landfills without gas collection systems are to be considered fugitive emissions and are not included in the NSR applicability determination. This does not mean that the applicant's decision on whether to collect emissions is the deciding factor; in fact, the reviewing authority makes the decision on which emissions would ordinarily be collected and which therefore are not considered fugitive emissions.

It should be noted that NSR applicability is pollutant specific. Therefore, where the landfill gas is flared or otherwise combusted or processed before release to the atmosphere, it is the pollutant released which counts toward NSR applicability. As an example, landfill gas is composed mostly of volatile organic compounds, but when this gas is burned in a flare, it is the type and quantity of pollutants in the exhaust gas (e.g., nitrogen oxides and carbon monoxide) that are used in the NSR applicability determination.

If you have any questions regarding this matter, please contact Gary McCutchen, Chief, New Source Review Section, at FTS 629-5592.

cc: Chief, Air Branch
Regions I-X

Kate

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
230 SOUTH DEARBORN ST.
CHICAGO, ILLINOIS 60604

REPLY TO THE ATTENTION OF:

17 DEC 1987

Mr. Robert Hodanbosi
Division of Air Pollution Control
Ohio Environmental Protection Agency
P.O. Box 1049
Columbus, Ohio 43266-0149

Dear Mr. Hodanbosi:

Pursuant to my May 15, 1987, letter to you concerning new source review (NSR) guidance, this letter provides further guidance materials and will be designated letter No. 3-NSR.

I am enclosing for your information the following policy and guidance documents:

1. An October 6, 1987, memorandum from Gerald A. Emison entitled "Emissions from Landfills."

2. A December 1, 1987, memorandum from J. Craig Potter entitled "Improving New Source Review (NSR) Implementation."

I would like to point out that the second memorandum contains very significant new guidance for the new source review program.

If you have any questions or comments please feel free to contact me.

Sincerely yours,

Joseph W. Paisie

Joseph Paisie, Chief
Technical Analysis Section
Air and Radiation Branch (5AR-26)

Enclosures

Copies for Terry, Ron, Jack F

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
215 Fremont Street
San Francisco, Ca. 94105

Good question!

MEMORANDUM

DATE:

SUBJECT: Control of Emissions from Landfills

FROM: David P. Howekamp, Director
Air Division

TO: Gerald Emison, Director
Office of Air Quality Planning and Standards (MD-10)

On May 28, 1987, Region IX received an inquiry from Mr. Russ Baggerly regarding a proposed landfill in Ventura County, California (copy enclosed). Mr Baggerly's concern, from an air quality point of view, is over significant fugitive emissions of reactive organic compounds from the site itself, and ROC and NO_x from associated mobile sources and possible IC engines.

Our proposed response (enclosed) delineates the exclusion of fugitive emissions from NSR regulations. The critical question then becomes, what is the meaning of the definition of fugitive emissions stated in 40 CFR 51.18? As defined they are: "those emissions which could not reasonably pass through a stack, chimney, vent or other functionally equivalent opening." If emissions from a landfill could feasibly be collected and passed through a gas recovery system, what criteria would be needed to then call it a reasonable option? Is it possible that such a landfill could be required to collect these emissions? This has not been done in the past. Please send us a written response providing guidance on this issue.

Enclosures

cc: G. McCutchen, RTP

Take for response — Target 2 weeks
Pls coordinate w/ Farmer
Note — Thanks — Sta
9/4

- Policy?
- ARCO comparison?
Can w/ division?
W 6/3/87

Wayne

~~Barbara~~ Noted

22 May 1987

AIR DIVISION
U.S. EPA, REGION 9

MAY 28 1987

RECEIVED

Mr. David P. Howekamp
Director - Air Management Division
United States Environmental Protection Agency
Region IX
215 Fremont Street
San Francisco, CA 94105

Dear Mr. Howekamp:

An interesting problem is about to surface here in Ventura County in regards to a possible major source. That source is a canyon landfill site currently in the process for environmental review through the Resource Management Agency of Ventura County.

Previous environmental review concerning this site was documented in the County Solid Waste Management Plan (CoSWMP). It was this document that originally divulged the fact that the Weldon Canyon landfill site, based upon the projected wastestream, would have the potential of emitting more than 100 TPY of ROC. Further study reveals that even after gas recovery mitigation the site will produce more than 100 TPY. This would of course make the project a Major Stationary Source according to 40 CFR Ch.1 §51.18 et seq..

The specific problems are these; 1. the district has never issued a permit for a landfill site as an area source. They have issued permits for the IC engines used for electrical generation on other sites for NOx, but landfill site fugitive emissions have never been permitted. 2. The incremental indirect emissions from mobile sources associated with this project may or may not be included in the total number of emissions attributed to this project. 3. The total emissions from the landfill site should be the NOx and ROC emissions from mobile, IC engine and all other sources added to the primary source that are the fugitive emissions from the site itself.

What I would like to know is how EPA views landfill sites, and the procedure for permitting such a source. Are all the emissions associated with the site accumulated into one figure for calculating the offsets required; e.g. incremental indirect (mobile) emissions, sludge drying ponds, leachate retention ponds, gas recovery wells, electrical generating engines, and the fugitive emissions from the landfill site itself. The possibility of emissions from all mitigation measures employed at the site should be included.

DRAFT-EPA Region IX

IN REPLY A-3-1
REFER TO: NSA 2-5

Mr. Russ Baggerly
119 S. Poli Ave.
Meiners Oaks, Ca. 93023

Dear Mr. Baggerly,

Thank you for your May 28, 1984 inquiry to David P. Howekamp regarding environmental review of air emissions from a landfill site in Ventura County. The question you raised in your letter regarding landfill emissions is not unique to Ventura Co. A landfill can be a significant source of emissions, and would be considered to be a stationary source.

A landfill would be subject to New Source Review (NSR), if its potential to emit, excluding fugitive emissions, exceeds the applicable major source cut-off. Fugitive emissions as defined in 40 CFR 51.18 (j)(1)(ix) are "those emissions which could not reasonably pass through a stack, chimney, vent, or other functionally equivilent opening." Landfill emissions that can be collected would not qualify as fugitive and could cause the landfill to be subject to NSR. VOC's emitted outside a gas recovery system would be fugitive, and not subject to federal NSR review according to 40 CFR 51.18 (j)(1)(iv)(c). District regulations may be more, but not less stringent than federal.

As a point of clarification, 40 CFR 51.18 sets forth federal requirements for the State or District to develop a State Implementation Plan for stationary sources. Please note that in the case of this landfill, the applicable NSR regulations of the Ventura County Air Pollution Control District (APCD) would apply, (not 40 CFR 51.18). Therefore, they should be contacted to make this determination.

As you probably know, the emissions from this site should be included in the 1987 Air Quality Management Plan for Ventura County. The Plan is being drafted partly in response to the fact that Ventura County has been named as one of the four post 1987 non-attainment areas in California for ozone. It is the responsibility of the Ventura County APCD to consider all measures that would reduce emissions of pollutants that contribute to the post 87 non-attainment status. Certainly the ROC emissions from this facility, if they are of the magnitude stated in your letter, would exacerbate the ozone problem in Ventura. The District has at its discretetion, the power to propose control, offset, or other requirements beyond those required by current regulations, as

part of its plan to achieve attainment of the National Ambient Air Quality Standards.

If you have further questions regarding this matter, please contact Janet Stromberg of the New Source Section at (415) 974-8218

Sincerely,

Wayne A. Blackard, Chief
New Source Section

part of its plan to achieve attainment of the National Ambient Air Quality Standards.

If you have further questions regarding this matter, please contact Janet Stromberg of the New Source Section at (415) 974-8218.

Sincerely,

Wayne A. Blackard, Chief
New Source Section

State of Ohio Environmental Protection Agency

STREET ADDRESS:
Lazarus Government Center
122 South Front St.
Columbus, OH 43215

TELE: (614) 644-3020 FAX: (614) 644-2329

MAILING ADDRESS:
Lazarus Government Center
P. O. Box 1049
Columbus, OH 43216-1049

William Hayes
Vorys, Sater, Seymour and Pease LLP
Suite 2100, Atrium Two
221 E. Fourth Street,
P O Box 0236
Cincinnati, OH - 45201-0236

April 6, 2000

Re: Clean Air Act Section 112(g)

Dear Mr. Hayes:

This is in response to your letter dated February 22, 2000, requesting a confirmation of the 112(g) issues we had discussed over the phone. As I mentioned to you, I discussed these issues with Ms Kathy Kaufman and Ms Genevieve Damico of the U.S. EPA, and we are in concurrence with the following conclusions.

You wanted to confirm Ohio EPA's conclusion that if a reconstructed project begins prior to the proposal of the 112(d) standard, the reconstructed source will ultimately be subject to the 112(d) existing source MACT standard, and not the 112(d) new source MACT standard. In concurrence with the U.S. EPA, I confirm the conclusion that if the reconstruction of a source begins prior to the proposal of a 112(d) standard, the source will be subject to the 112(d) existing source MACT standard. As you mentioned, the reconstructed source will have to comply with the 112(g) case-by-case MACT until such time as the 112(d) MACT standard for existing sources becomes applicable to the source. However, please note that if the 112(g) determination happens to be more stringent than the existing source 112(d) requirement, then the Ohio EPA has the option of requiring the source to keep the more stringent controls forever.

You asked for confirmation on the 112(d) compliance deadlines for reconstruction projects. If the reconstruction projects begin prior to the proposal of the relevant 112(d) standard, the deadline for compliance with the final 112(d) standard will be the period set out in the final standard for existing sources (which will be no longer than 3 years pursuant to 40 CFR Section 63.6 (c)). However, the owner will be eligible to apply for an extension of the deadline if the 112(g) determination has been obtained and is submitted before the close of the comment period for the relevant 112(d) standard. In this case, an extension can be granted pursuant to the 112(g) provisions at 40 CFR Section 63.44(b)(1) or (2).

I hope this letter of confirmation will be helpful to your client in their planning stages. If you have any more questions, please feel free to contact me at (614) 728-1354

Sincerely,

Radhica Sastry

Radhica Sastry

MACT Standard Engineer
Division of Air Pollution Control
Ohio EPA

cc: Paul Koval, ATU
Mike Hopkins, AQM&P
Kathy Kaufman, U.S. EPA
Genevieve Damico, U.S. EPA

Ohio EPA
Division of Air Pollution Control

inter-office communication

to:	Distribution
from:	Stacey Coburn and Kay Gilmer, CO MACT Coordinators
subject:	112(g) training
date:	January 20, 1999

The purpose of this IOC is to serve as a training tool for all Ohio New Source Review permit writers and their supervisors. Ohio has recently adopted changes to OAC 3745-31 which incorporate federal requirements for new or reconstructed major sources of hazardous air pollutants (HAPs). This program is commonly known as 112(g). 112(g) is a gap-filling measure designed to address the concern that although almost all major sources of HAPs will be regulated by a MACT (Maximum Achievable Control Technology) standard eventually, some of these standards won't be effective until the year 2003 or later. If construction or reconstruction of a major source of HAP occurs before the applicable MACT standard is written, then 112(g) requires that the MACT level of control be achieved at the time of construction or reconstruction, when controls can be installed most cost-effectively.

Often, the trickiest part of a 112(g) determination will be the applicability determination. The 112(g) applicability threshold is different from that of a typical MACT standard because it is based on the potential to emit of a *process or production unit* rather than the entire facility. 112(g) only affects a new or reconstructed *process or production unit* (as defined in the 112(g) rule) that is, in itself, a major source of HAP. A process or production unit is defined as "any collection of structures and/or equipment that processes, assembles, applies, or otherwise uses material inputs to produce or store a final or intermediate product." The determination of exactly which equipment at a facility constitutes a *process or production unit* is fairly involved; examples are listed in the preamble of the federal 112(g) rule, found in the Federal Register December 27, 1996. We have attached these examples to the hard copy of this IOC that will be sent to each office; please take a few minutes to review them as they are very helpful in explaining the concept of a *process or production unit.*

If it is determined that a *process or production unit* is being constructed or reconstructed, and is a major source of HAPs in itself, then a 112(g) determination must be done. A 112(g) determination is similar to a LAER (Lowest Achievable Emissions Rate) determination. A 112(g) source must meet the new source MACT floor level of emission control for HAPs; this is equivalent to the level of control achieved by the best-controlled *similar source* (as defined by the 112(g) rule) in the United States. A 112(g) determination may be more stringent than the MACT floor, but to go beyond the floor cost-effectiveness must be considered. This level of control may already be defined for some MACT categories, and in those cases information is found in the following sources, described as *available information*:

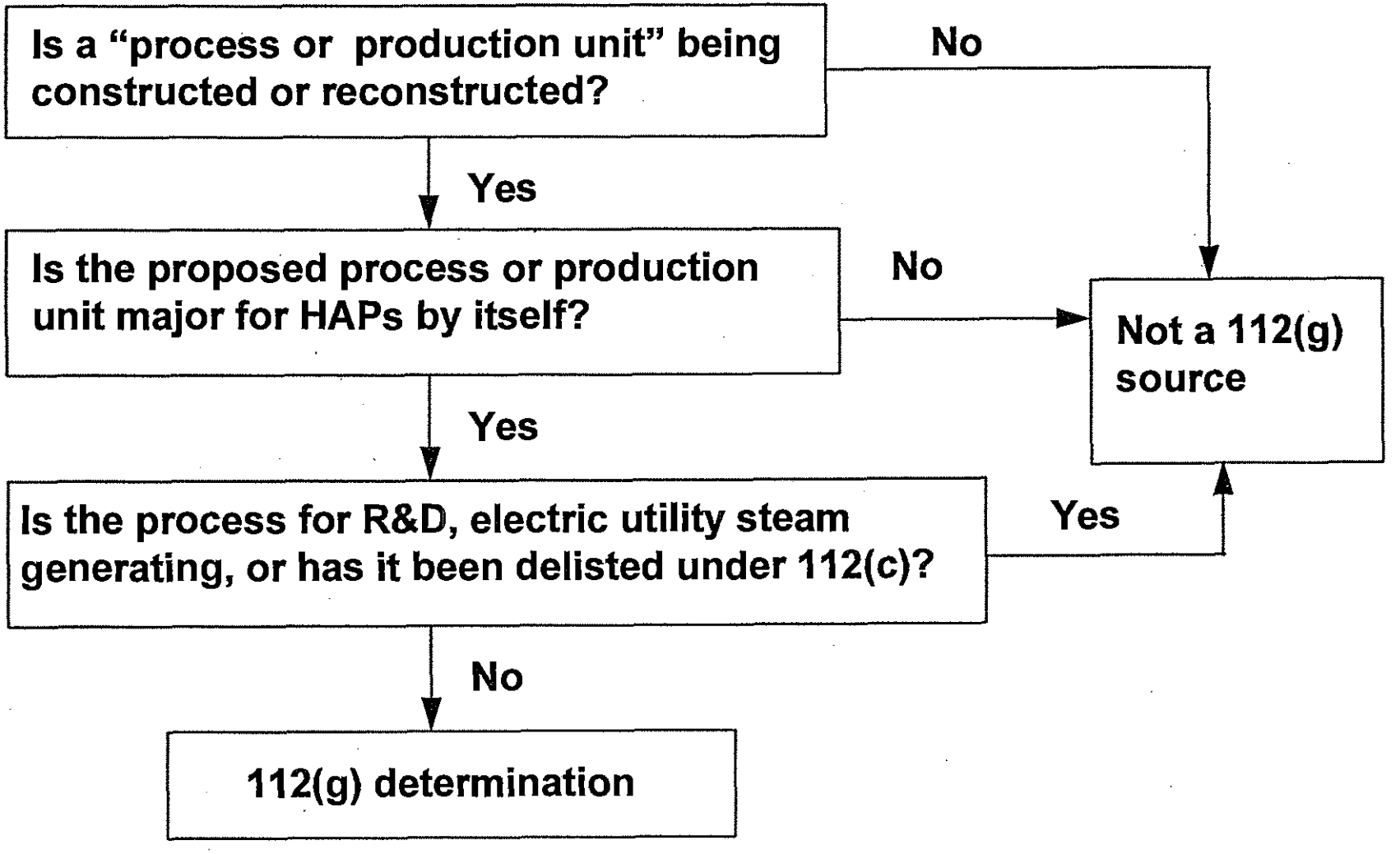
1. Proposed or presumptive MACT standards
2. Background Information Documents for any MACT standards
3. Any information or guidance from the Administrator establishing a MACT floor finding and/or MACT determination
4. Data from the Clean Air Technology Center
5. Other states' 112(g) determinations in the Aeromatic Information Retrieval System (AIRS) MACT database
6. Any additional information expeditiously provided by the Administrator

If no *available information* is found that is applicable to the proposed source, the permit writer should look for similar sources in a manner similar to that of a BAT determination. However, for 112(g), the search for similar sources should not be limited to sources in Ohio. In order to be similar, the sources must be similar in design and capacity, and must have similar emissions (able to be controlled by the same control technology.) The proposed source must meet the level of control achieved by the best-controlled similar source. It is a possibility that BAT would be more stringent than 112(g), but these cases would be very rare. Cost effectiveness is not a factor in determining the level of control required by 112(g) unless controls more stringent than the control achieved by the best-controlled similar source is being considered.

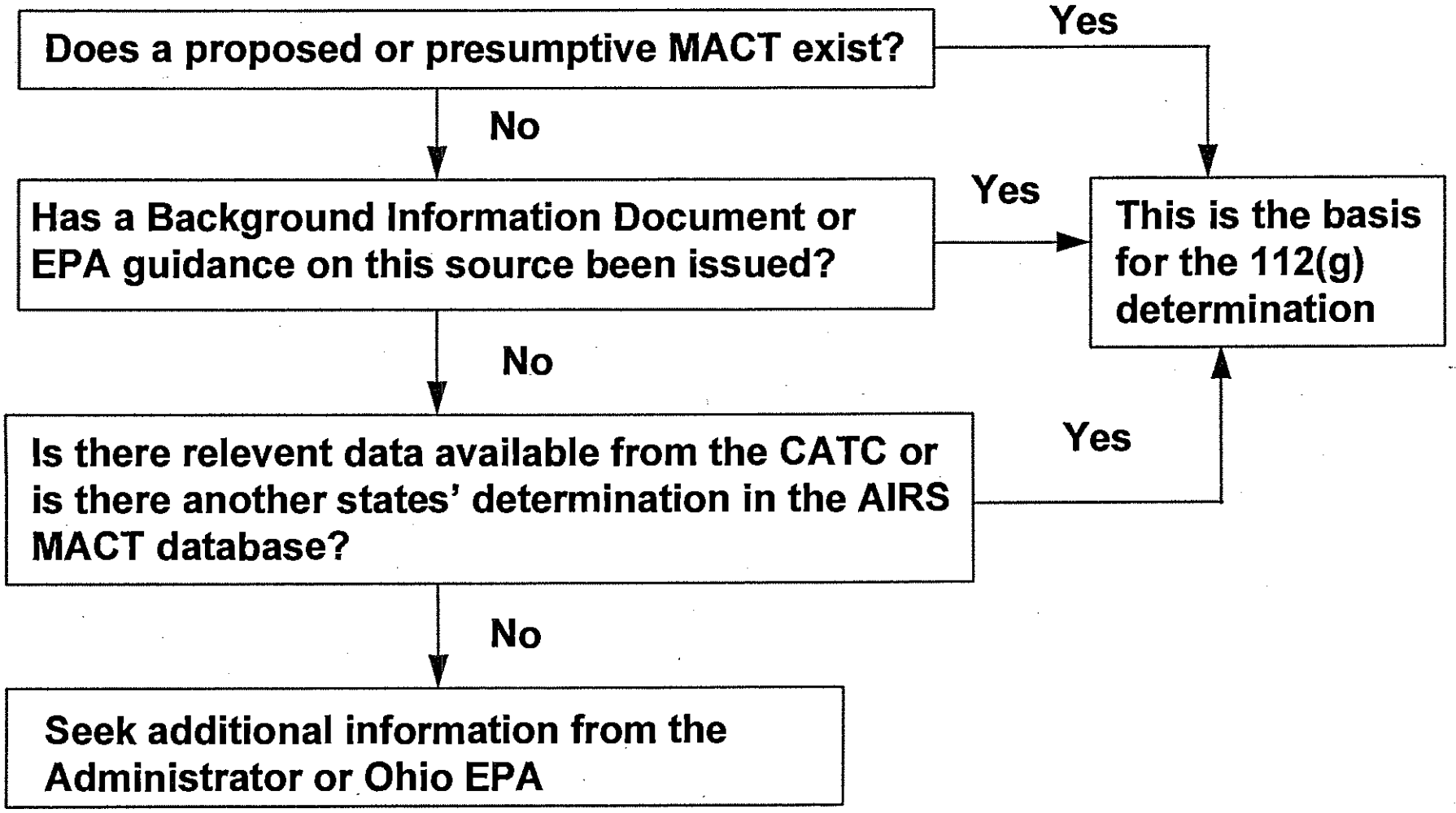
According to the rule, the facility is supposed to determine the appropriate level of control to meet 112(g) requirements and submit a proposed 112(g) determination with the PTI application. Because of the newness and complexity of this rule, it is expected that most facilities will need assistance from the field office permit writer to complete a 112(g) determination. If the permit writer needs assistance, the Central Office MACT contacts Kay Gilmer (614) 644-3698 and Stacey Coburn (614) 728-1354 are available and happy to offer assistance.

It is important that each permit writer review all PTI applications carefully that propose emissions of more than 10 tons per year of any single HAP or 25 tons per year of combined HAPs. The responsibility of identifying sources that are subject to 112(g) is an important one that is most effectively performed by a field office permit contact. If you have any questions about this rule at any time, feel free to contact us. We look forward to working with you to implement this new Air Toxics / New Source Review program.

112(g) Applicability Flowchart



112(g) Determination Flowchart



unless the structures and/or equipment being constructed at an existing plant site have the potential to emit major amounts of HAP.

The following sample applicability determinations provide further guidance in judging when a source is subject to section 112(g) requirements:

1 *Example 1.* At a plant which manufactures fiberglass reinforced plastic boats, the owners wish to add more spray guns to an existing fabrication line to supplement the existing spray guns in laminating a particular model of boat hulls. The new spray guns will have a PTE greater than 10 tons/year of a HAP.

In this example, EPA views the fiberglass hull of a boat as an intermediate product in the manufacture of the final product (i.e., the boat with deck, trim, paint, engine, etc.) The collection of structures and/or equipment needed to manufacture the intermediate product, in this case, includes the existing spray guns and other operations in the building (e.g., the lamination operation and other equipment) that typically are found in the production of boats. Because the newly added spray guns in and of themselves do not produce the intermediate product, the EPA does not view the additional spray guns for lamination as a process or production unit that is subject to review under section 112(g).

2 *Example 2.* Using Example 1, assume that the owner adds more spray guns to laminate a second model of boat hulls. The room is large enough to accommodate two lamination processes at the same time. The new spray guns have a PTE greater than 10 TPY.

The same rationale used in Example 1 applies here. The collection of equipment needed to produce the boat hull includes the lamination process as well as the gel coat process. Because the addition of the second lamination process does not produce an intermediate product, if no additional laminating or other essential equipment were added, it would not be subject to review under section 112(g).

3 *Example 3.* Using Example 2, a gel coat spray booth and supporting equipment needed to manufacture the boat hulls are added in addition to the spray guns.

The process or production unit in this example is the set of equipment that consists of the gel coat spray booths, the spray gun, and the supporting equipment. This new set of equipment can reasonably operate alone and produce an intermediate product. Consequently, all sources of HAP in this set of equipment, which includes the gel coat spray booth and the spray guns in the laminating room, are subject to review under section 112(g).

4 *4.* An aluminum reduction plant has several potlines which manufacture aluminum. Each potline consists of between 100 and 200 electrolytic reduction cells or "pots" that are connected together in series electrically to complete a circuit. Each pot produces molten aluminum. The company wishes to add more pots on each line. The additional pots will result in a major increase in emissions.

Although each individual pot contributes to the production of the aluminum, the separate pots are not considered to be discrete process or production units in that they cannot operate independently. In addition, it does not make sense from an engineering standpoint to apply new source MACT only to the additional pots. The best time to apply new source MACT is when constructing an entirely new potline. The EPA does not view each separate pot as a process or production unit and thus the individual pots are not subject to review under section 112(g). The EPA sees the pots within the potline as being both functionally and physically interconnected and unable to function alone. Thus, EPA does not consider the pots as discrete process or production units.

5 *Example 5.* Using Example 4, assume the aluminum production facility adds a new potline which is a major source of HAP.

The EPA considers the entire potline as the collection of structures and equipment that produces an intermediate product (i.e., molten aluminum). Since it fits within the definition of a process or production unit, the potline is subject to review under 112(g). Also, note that the potline is an example of a process or production unit that is part of a larger production unit, the aluminum production plant.

6 *Example 6.* At an automobile assembly paint shop, three coating steps, primer, surfacer, and top coat, are used to paint the automobile body. Another parallel topcoat step is added to the existing topcoat step. Both top coat steps then feed back into a bake oven. The new top coat step will be a major source of HAP.

The new parallel topcoat step is not subject to review under section 112(g). The intermediate product in this case is the painted automobile body. The top coating step cannot take place without the preceding primer and surfacer steps and the supporting infrastructure. Additionally, the intermediate product cannot be completed without the bake oven step. Consequently, the topcoat by itself is not a discrete process as it is only one step in a series of steps necessary to produce an intermediate or final product. (Although unlikely, if an existing automobile assembly plant were to build a second paint shop, this should be reviewed under section 112(g).)

3. Reconstruction. Section 112(g) continues the concept of "reconstruction" contained in past regulatory programs. The concept of reconstruction is intended to prevent the circumvention of "new source" requirements by completely overhauling existing equipment. Current air pollutant emission standards under previous requirements of the Act treat replacement of components as a reconstruction if the replacement represents more than 50 percent of the capital cost of the new unit.

For section 112(g), the requirements apply to the reconstruction of a "major source," and this rule defines "reconstruct a major source" as the replacement of components at a major source such that the replacement exceeds 50 percent of the capital cost of either an entirely new major source, or of a comparable process or production unit where the process or production unit, if newly constructed, would have been considered a constructed major source under this rule. (For the sake of clarity, the EPA has deleted that portion of the reconstruction definition in the draft rule that referred to a "group of process or production units" being reconstructed, so that the definitions of both construction and reconstruction would refer to the same units).

MACT Determinations

Section 63.43 reflects the statutory requirement that an owner or operator who proposes to "construct or reconstruct" a major source must obtain a determination from the "permitting authority" that the "MACT emission limitation for new sources" will be met. The "permitting authority" is defined as the agency responsible for the title V permit program. Further discussion of this issue, and of other issues related to implementation of section 112(g), is contained in section IV of this preamble.

This section of the preamble discusses the procedures for making these MACT determinations. These procedures include technical review procedures needed to establish a MACT emission limitation and a corresponding MACT control technology, and, (where appropriate), administrative procedures for submitting and reviewing applications for MACT determinations. In this rule, the overall process for MACT determinations is outlined in § 63.43.

1. Overall Process for MACT Determinations. Where no MACT standard under section 112(d) has been promulgated, section 112(g) requires a case-by-case determination of the MACT emission limitation. This "determination" can take any of three

Ohio EPA
Division of Air Pollution Control

inter-office communication

to:	Distribution
from:	Stacey Coburn through Jim Orlemann and Mike Hopkins
subject:	Incorporating Proposed MACTs Into Permits
date:	September 25, 1998

We have received questions about whether or not to incorporate **proposed** MACT (Maximum Achievable Control Technology) requirements into permits. Proposed MACT standards should be included in a PTI or a Title V permit. The MACT standard should be listed as an applicable requirement, and the terms and conditions should include two reporting requirements. These reporting requirements may consist of the initial notification report and the notification of compliance status report that are required by the MACT general provisions. Some sample permit language is provided below:

1. Within 120 days after promulgation of 40 CFR 63 Subpart _____, the permittee shall submit an Initial Notification Report which certifies whether or not the permittee is subject to the promulgated standard. If the permittee is subject to the final standard, the following information shall also be included in the Initial Notification Report:

    a. The name and mailing address of the permittee;

    b. The physical location of the source if it is different from the mailing address;

    c. Identification of the relevant MACT standard and the permittee's compliance date;

    d. A brief description of the nature, design, size, and method of operation of the source, including the operating design capacity and an identification of each emission point of each hazardous air pollutant;

    e. A statement of whether or not the permittee is a major source or an area source according to the promulgated MACT.

2. Within 60 days following completion of the required compliance demonstration activity specified in the 40 CFR 63 Subpart _____, the permittee shall submit a notification of compliance status that contains the following information:

a. The methods used to determine compliance;

b. The results of any performance tests, opacity or visible emission observations, continuous monitoring systems (CMS) performance evaluations, and/or other monitoring procedures or methods that were conducted;

c. The methods that will be used for determining continuous compliance, including a description of monitoring and reporting requirements and test methods;

d. The type and quantity of hazardous air pollutants emitted by the source, reported in units and averaging times in according with the test methods specified in 40 CFR 63 Subpart _____;

e. An analysis demonstrating whether the affected source is a major source or an area source;

f. A description of the air pollution control equipment or method for each emission point, including each control device or method for each hazardous air pollutant and the control efficiency (percent) for each control device or method; and

g. A statement of whether or not the permittee has complied with the requirements of 40 CFR 63 Subpart _____.

This language should be included in the reporting requirements section of the permit. If you have any questions about this language, please contact Stacey Coburn at (614) 728-1354.

Ohio EPA
Division of Air Pollution Control

inter-office communication

to:	distribution
from:	Stacey Coburn MACT Engineer
subject:	Correction to 12/26/96 memo on MACT FESOPs
date:	January 10, 1997

On December 26, 1996, you were sent a memo from the Field Operations Section which stated that all MACT sources that wish to avoid major source status under the MACT by limiting their potential to emit must have a FESOP issued before their initial MACT compliance date. After further consideration of this issue by our office and the Region 5 U.S. EPA office, there are two cases in which this would not be true. The two cases are:

1. Sources that maintain adequate records to demonstrate that actual emissions are less than 50% of the major source threshold.

2. Sources emitting between 50-100% of the major source threshold that hold state-enforceable limits that are enforceable as a practical matter.

A source that meets either one of these conditions, and wishes to limit its potential to emit, does not need a FESOP until July 31, 1998, or until the initial compliance deadline of the applicable MACT regulation, whichever is later. Attached, you will find the policy memo on which this information is based. If you have questions about this issue, feel free to call me at (614)728-1354 to discuss it further.

The Field Operations Section would still like to see an assessment from each office of how many facilities will be affected by this policy. This information can be brought to the next MACT team meeting, which is scheduled for February 12 at Central Office. If you are not attending that meeting, or wish to submit the information earlier, please send it to Tom Rigo at Central Office. We appreciate your efforts so far and apologize for any inconvenience caused by the December 26 memo.

Distribution:

Laura Miracle, Akron
Lynn Malcolm, Akron
Brad Miller, Cincinnati
Harry Swietering, Cincinnati
Andy Roth, RAPCA
Curt Marshall, RAPCA
Harold Strohmeyer, NOVAA
Richard Ramhoff, Mahoning-Trumbull
John Scrip, Mahoning-Trumbull
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Cheryl Suttman, CDO
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Fred Klingelhafer, SEDO

Paul Koval, DAPC ATU
Mike Hopkins, DAPC AQM&P
Sherri Swihart, DAPC AQM&P

AQM&P permitting staff
Engineering permitting staff

August 27, 1996

MEMORANDUM

SUBJECT: Extension of January 25, 1995 Potential to Emit Transition Policy

FROM: John S. Seitz, Director
Office of Air Quality Planning and Standards (MD-10)

Robert I. Van Heuvelen, Director
Office of Regulatory Enforcement (2241A)

TO: See Addressees

This memorandum extends the Environmental Protection Agency's (EPA) January 25, 1995, transition policy for potential to emit (PTE) limits relative to maximum achievable control technology (MACT) standards issued under section 112 of the Clean Air Act. In addition, this memorandum discusses the implications of a recent court decision relative to the title V operating permits program.

Background

Many MACT standards apply only to major sources, that is, those with a PTE greater than a given level. A source's PTE, that is, the amount the source could possibly emit, is affected by its maximum physical capacity to operate and emit and by enforceable limits. The current definition of PTE for the MACT program, which is contained in 40 CFR part 63, subpart A, requires that limits affecting a source's PTE must be enforceable by the EPA and citizens in order to be taken into account in the PTE calculation. These regulations are currently under review, and the EPA is engaged in a rulemaking process to amend the current requirements. The EPA is currently reviewing information resulting from a stakeholder process that was designed to explore options related to this rulemaking. Further information on options being considered is contained in Attachment 1, which is a stakeholder discussion paper of January 31, 1996.

The Current Transition Policy

In a policy memorandum of January 25, 1995, the EPA announced a transition policy. This transition policy was to alleviate concerns that sources may face gaps in the ability to acquire federally-enforceable PTE limits because of delays in State adoption or EPA approval of programs or in their implementation. In order to ensure that such gaps would not create adverse consequences for States or for sources, the EPA provided that for a 2-year period extending from January 1995 to January 1997 (for sources lacking federally-enforceable limitations), State and local air regulators have the option of treating the following types of sources as non-major:

(1) sources who maintain adequate records to demonstrate that actual emissions are less than 50 percent of the major source threshold, and

(2) sources emitting between 50-100 percent of the threshold, but holding State-enforceable limits that are enforceable as a practical matter.

The National Mining Decision

In the National Mining court decision (National Mining Association v. EPA, 59 F.3d 1351 (D.C. Cir. 1995), the court addressed hazardous air pollutant programs under section 112. The court found that EPA had not adequately explained why only federally-enforceable measures should be considered as limits on a source's PTE. Accordingly, the court remanded the section 112 General Provisions regulation (40 CFR part 63, subpart A) to EPA for further proceedings. Notably, in National Mining the court required the EPA to reconsider the Federal enforceability requirement, but did not vacate the requirement. As a result, the requirement for Federal enforceability is still in effect.

Extension of Transition Policy

It is unlikely at this time that on-going efforts to amend the PTE requirements in the MACT standard General Provisions, to address the National Mining decision, will be completed before January 1997. These rule amendments will affect any Federal enforceability requirements that may apply in the future for PTE limits under the MACT program. As a result, it is likely that after January 25, 1997, there will continue to be uncertainty with respect to the Federal enforceability of limits, and thus the basis for the January 25, 1995, transition policy will

continue to be valid. The EPA is, therefore, extending the transition period for the MACT program for an additional 18-month period (January 25, 1997 to July 31, 1998).

Implications of Recent Court Decision for the Title V Program

In Clean Air Implementation Project vs. EPA, No. 96-1224 (D.C. Cir. June 28, 1996), the court remanded and vacated the requirement for Federal enforceability for PTE limits under part 70. Because the court vacated this requirement, the term "federally enforceable" in section 70.2 should now be read to mean "federally enforceable or legally and practicably enforceable by a State or local air pollution control agency" pending any additional rulemaking by the EPA.

The EPA interprets the court order vacating the part 70 definition as not affecting any requirement for Federal enforceability in existing State rules and programs, that is, whether Federal enforceability is required as a matter of State law. Pending the outcome of the current rulemaking effort, the EPA believes that States are not likely to pursue submittals for program revisions. There may, therefore, be States wishing to continue to observe the transition policy. Accordingly, the EPA is extending the transition policy as it relates to title V permitting for an additional 18 months (January 25, 1997 through July 31, 1998).

Implications for New Source Review

Neither the January 25, 1995, transition policy, the National Mining Association court decision, nor the Clean Air Implementation Project court decision impact the New Source Review (NSR) and prevention of significant deterioration (PSD) programs. The EPA's current policy with respect to PTE issues related to the NSR and PSD programs remains as described in the January 22, 1996, policy memorandum, "Release of Interim Policy on Federal Enforceability of Limitations on Potential to Emit," which is included as Attachment 2.

Distribution/Further Information

We are asking Regional Offices to send this memorandum to States within their jurisdiction. Questions concerning specific issues and cases should be directed to the appropriate Regional Office. The Regional Office staff may contact Timothy Smith of the Integrated Implementation Group at 919-541-4718; Adan Schwartz of the Office of General Counsel at 202-260-7632; or Charlie Garlow of the Office of Regulatory Enforcement at

202-564-1088. The document is also available on the technology transfer network (TTN) bulletin board, under "Clean Air Act, Title V, Policy Guidance Memos." (Readers unfamiliar with this bulletin board may obtain access by calling the TTN help line at 919-541-5384).

Attachments

Addressees:
Director, Office of Ecosystem Protection, Region I
Director, Division of Environmental Planning and Protection, Region II
Director, Air, Radiation, and Toxics Division, Region III
Director, Air, Pesticides, and Toxics Management Division, Region IV
Director, Air and Radiation Division, Region V
Director, Multimedia Planning and Permitting Division, Region VI
Director, Air, RCRA, and TSCA Division, Region VII
Assistant Regional Administrator, Office of Pollution Prevention, State, and Tribal Assistance, Region VIII
Director, Air and Toxics Division, Region IX
Director, Office of Air, Region X
Regional Counsels, Regions I-X
Director, Office of Environmental Stewardship, Region I
Director, Division of Enforcement and Compliance Assurance, Region II
Director, Enforcement Coordination Office, Region III
Director, Compliance Assurance and Enforcement Division, Region VI
Director, Enforcement Coordination Office, Region VII
Assistant Regional Administrator, Office of Enforcement, Compliance and Environmental Justice, Region VIII
Enforcement Coordinator, Office of Regional Enforcement Coordination, Region IX

cc: C. Garlow, 2242A
J. Ketcham-Colwill, 6103
A. Schwartz, 2344
T. Smith, MD-12

cc: Misty, Alan, Stacey, Sarah, Steve
Return original: Hopkins

DEC 26 1996

OhioEPA *Division of Air Pollution Control*

inter-office communication

to: Distribution

from: Tom Rigo

subject: Potential MACT major facilities requesting a FESOP

date: December 26, 1996

IMPORTANT !!!

The purpose of this note is to clarify to all district and local air agency permit review staff that U.S. EPA currently employs a very rigid policy for all MACT major facilities. A copy of the May 16, 1995 John Seitz, U.S. EPA policy is enclosed. It is very important to understand that a potential MACT major facility that wants an opportunity to restrict its potential to emit must be **issued** a **final** FESOP permit before the "first compliance date" of the new MACT standard has occurred. If a company fails to obtain the **final** FESOP prior to the "first compliance date," USEPA has taken the position that once a major always a major. Therefore a FESOP (synthetic minor facility) is not possible beyond this deadline.

It should be obvious that Ohio EPA does not want to be responsible for any Ohio company failing to receive the opportunity to be considered a minor MACT facility due to the Ohio EPA or their delegated agents failing to timely process a FESOP application. This could have significant consequences to staff who personally fail to timely process these permits. In an effort to ensure that we do not encounter any problems reviewing and processing these potential MACT major facility FESOP application requests, I request that all the DO and LAA permit review staff supervisors fax or E-mail me a list of this type of FESOP applications that you have received. Please provide the name of the facility, facility I.D., the MACT pollutant in question and the "first compliance date" deadline for which a final FESOP permit is required. Please fax or E-mail these lists to me by 1/7/97. If you find that your office did not receive any potential MACT major

facility FESOP applications, please send me a note to that effect. As you may know, we have several new MACT's with early-March 1997 deadlines for which FESOP applications have been received. If you have not begun your review of these applications, you should immediately begin to review them.

Should you have any questions, please feel free to contact me or Jim Orlemann. Thank you.

Hardcopy Distribution:

DO/LAA Permit Review Supervisors
Jim Orlemann, DAPC
Mike Hopkins, DAPC
Bob Hodanbosi, DAPC
Cheryl Newton, U.S. EPA, Region 5

E-mail Distribution:

All DO staff
All LAA staff with E-mail capability
All Central Office permit review staff

S/C Directors SC

UPM
ES
PES

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
RESEARCH TRIANGLE PARK, NC 27711

MAY 16 1995

OFFICE OF AIR QUALITY PLANNING AND STANDARDS
RECEIVED
MAY 19 1995
AIR AND RADIATION DIVISION
U.S. EPA REGION V

MEMORANDUM

SUBJECT: Potential to Emit for MACT Standards -- Guidance on Timing Issues

FROM: John S. Seitz, Director
Office of Air Quality Planning and Standards (MD-10)

TO: Linda Murphy, Region I
Conrad Simon, Region II
Thomas Maslany, Region III
Winston Smith, Region IV
David Kee, Region V
Stanley Meiberg, Region VI
William Spratlin, Region VII
Patricia Hull, Region VIII
David Howekamp, Region IX
Jim McCormick, Region X

Section 112 of the Clean Air Act distinguishes between major sources and area sources of hazardous air pollutants. Although maximum achievable control technology (MACT) is required for all major sources of hazardous air pollutants, lesser controls or no controls may be required of area sources in a particular industry. In addition, whether a facility is a major or area source of hazardous air pollutants may affect the applicability of other CAA requirements -- such as when or whether the facility is required to obtain a Title V operating permit.

The purpose of this memo is to clarify <u>when</u> a major source of hazardous air pollutants can become an area source -- by obtaining federally enforceable limits on its potential to emit -- rather than comply with major source requirements. Timing questions are important to address now because several MACT standards have been promulgated and because an increasing number of sources are nearing deadlines for submitting Title V operating permit applications. The EPA recently provided guidance on <u>how</u> facilities can obtain federally enforceable limits on their potential to emit hazardous and criteria air pollutants in a January 25, 1995, memo from me to you.

STATUTORY AND REGULATORY BACKGROUND

Section 112 of the Act defines a "major source" as "any stationary source or group of stationary sources located within a contiguous area and under common control that emits or has the potential to emit considering controls, in the aggregate, 10 tons per year or more of any hazardous air pollutant or 25 tons per year or more of any combination of hazardous air pollutants..." The term "potential to emit" is defined in the section 112 general provisions (40 CFR Part 63.2) as " the maximum capacity of a stationary source to emit a pollutant under its physical or operational design," considering controls and limitations that are federally enforceable. This definition is consistent with definitions in regulations for the new source review and Title V permit programs.

SCOPE OF TODAY'S GUIDANCE

EPA has received a number of requests for clarification concerning when facilities may limit their potential to emit to avoid applicability of major source requirements of promulgated MACT standards. Most of these issues are not explicitly addressed by the section 112 general provisions nor by MACT standards themselves. Therefore, EPA is providing this guidance for MACT standards based on the Agency's interpretation of the relevant statutory language.

Today's guidance addresses three issues:

- By what date must a facility limit its potential to emit if it wishes to avoid major source requirements of a MACT standard?
- Is a facility that is required to comply with a MACT standard permanently subject to that standard?
- In the case of facilities with two or more sources in different source categories: If such a facility is a major source for purposes of one MACT standard, is the facility necessarily a major source for purposes of subsequently promulgated MACT standards?

EPA plans to follow this guidance memorandum with rulemaking actions to address these issues. The Agency intends to include provisions on potential to emit timing in future MACT rules and amendments to the section 112 general provisions. The EPA believes that the structure of section 112 strongly suggests certain outer limits for when a source may avoid a standard through a limit on its potential to emit. However, EPA also believes the statute may be flexible enough to allow the Agency

to reach different results through rulemaking. In forthcoming rulemaking, EPA will be considering alternative approaches that could garner additional environmental benefits and provide additional flexibility to small sources.

TIMING FOR OBTAINING POTENTIAL TO EMIT RESTRICTIONS: GUIDANCE FOR PROMULGATED STANDARDS

Existing sources

Today's guidance clarifies that facilities may switch to area source status at any time until the "first compliance date" of the standard. The "first compliance date" is defined as the first date a source must comply with an emission limitation or other substantive regulatory requirement (i.e., leak detection and repair programs, work practice measures, housekeeping measures, etc.., but not a notice requirement) in the applicable MACT standard. By that date, to avoid being in violation, a major source must either comply with the standard, or obtain and comply with federally enforceable limits ensuring that actual and potential emissions are below major source thresholds.

The Act does not directly address a deadline for a source to avoid requirements applicable to major sources through a reduction of potential to emit. However, a result that is consistent with the language and structure of the Act is that sources should not be allowed to avoid compliance with a standard after the compliance date, even through a reduction in potential to emit. In the absence of a rulemaking record supporting a different result, EPA believes that once a source is required to install controls or take other measures to comply with a MACT standard, it should not be able to substitute different controls or measures that happen to bring the source below major source levels.

Moreover, while some standards have multiple, staggered compliance dates, these requirements are intended to function in an integrated manner to meet the statutory goals for that source category. For such a standard, the relevant date for purposes of this policy is the first substantive compliance date. While the Act may permit exceptions to these general rules, any such exceptions will need to be developed through rulemaking.

Some have read the Act to require an even earlier deadline, namely, the date of standard promulgation. EPA believes this result is not as strongly compelled by the statute. It is reasonable to presume that Congress intended a source to have some opportunity to avoid a standard by becoming an area source once it has been identified as subject in a promulgated standard.

The compliance date deadline approach would give small emitters (i.e. facilities with actual emissions below the major threshold) time to limit their potential emissions rather than comply with major source requirements. Under this approach, a facility will have the same amount of time to comply whether it chooses to meet the standard or limit its potential to emit.

This compliance date approach for existing sources is also reasonable because it recognizes the circumstances that exist regarding MACT standards issued to date. States are in the process of developing additional mechanisms that can provide federally enforceable limits to sources. In addition, EPA rules have not previously specified when facilities may switch from major to area-source status to avoid MACT applicability. It would be inequitable to hold sources to a promulgation date deadline absent clear advance notice to sources of the full significance of that date. Although the Act gives EPA discretion to designate a deadline earlier than the first compliance date, this is most appropriately done through rulemaking in a manner that gives adequate notice to the regulated community. By contrast, any source should presume that the compliance date is the final date to establish its status as an area source, at least for purposes of that standard.

For clarity, the Agency wishes to note that as long as a facility does not qualify for treatment as an area source, the facility must comply with any applicable major source requirement under the Clean Air Act. Facilities in need to comply with additional limits to qualify as area sources will need to plan ahead to obtain the limits before compliance deadlines for major source requirements. Facilities should consult with State and local air agencies concerning the timing of any necessary submittal.

New sources

Section 112 requires new sources to comply with a MACT standard upon startup or no later than the promulgation date of the standard, whichever is later. As a legal matter, to avoid being in violation, a "potential" major source must either comply with MACT or obtain and comply with federally enforceable limits by this statutory deadline.

Therefore, the Agency advises that any new facility that would be a major source in the absence of federally enforceable limits must obtain and comply with such limits no later than the promulgation date of the standard or the date of startup of the source, whichever is later. For the same reasons articulated below with regard to existing sources, a new source that is major at the time of promulgation or startup will remain major for purposes of that standard.

Once In, Always In Interpretation

EPA is today clarifying that facilities that are major sources for HAPs on the "first compliance date" are required to comply permanently with the MACT standard to ensure that maximum achievable reductions in toxic emissions are achieved and maintained.

EPA believes that this once in, always in policy follows most naturally from the language and structure of the statute. In many cases, application of MACT will reduce a major emitter's emissions to levels substantially below the major thresholds. Without a once in, always in policy, these facilities could "backslide" from MACT control levels by obtaining potential-to-emit limits, escaping applicability of the MACT standard, and increasing emissions to the major-source threshold (10/25 tons per year). Thus, the maximum achievable emissions reductions that Congress mandated for major sources would not be achieved. A once in, always in policy ensures that MACT emissions reductions are permanent, and that the health and environmental protection provided by MACT standards is not undermined.

> Example: A facility has potential emissions of 100 tons/year. After compliance with the applicable MACT standard, which requires a 99 percent emissions reduction, the facility's total potential emissions would be 1 ton/year. Under today's guidance, that facility could not subsequently operate with emissions exceeding the maximum achievable control technology emission level. The facility could not escape continued applicability of the MACT standard by obtaining "area source" status through limitations on emissions up to the 10/25 ton per year major source thresholds.

Additionally, the Act requires all major sources to obtain a Part 70 operating permit. Section 501(2) provides that any source that is major under section 112 will also be major under title V. It follows that a source that is major for purposes of any MACT standard will be subject to title V as a major source. As clarification, most MACT standards explicitly require operating permits for major sources. However, this principle applies regardless of whether it is specified in the particular standard. Therefore, a source required to comply with MACT requirements applicable to major sources will also be required to obtain a Part 70 permit for that MACT requirement.

APPLICABILITY OF MULTIPLE MACT STANDARDS TO A SINGLE FACILITY

A facility that is subject to a MACT standard is not necessarily a major source for future MACT standards. For example, if after compliance with a MACT standard, a source's potential to emit is less than the 10/25 tons per year

applicability level, the EPA will consider the facility an area source for purposes of a subsequent standard.

> EXAMPLE: A facility has degreasing operations which emit 30 tons per year of HAP. The same facility also has the potential to emit 5 tons/year of HAP from the coating of miscellaneous metal parts. After complying with the Halogenated Solvent Cleaning MACT, the maximum potential emissions from degreasing operations is 3 tons per year. The total federally enforceable potential emissions from this facility would now be 8 tons per year which meets the definition for an "area source." Therefore, this facility would not be subject to the major source requirements of the future miscellaneous metal parts MACT standard.

It should be noted that EPA has authority to require additional reductions in toxic emissions from sources that avoid MACT requirements through reductions in potential to emit. Section 112(f), the residual risk program, requires EPA to evaluate the risk and to promulgate additional standards for each category or subcategory of major sources, and allows EPA discretion to do the same for area sources, where there is not an ample margin of safety to protect public health within 8 years after promulgation of the MACT standard. The EPA will consider whether residual risk standards are appropriate for sources complying with MACT standards or potential to emit limits.

In addition, EPA is committed to implementation of the urban area source program as required in Section 112(c)(3) of the CAA. This program requires EPA to issue air toxics standards for area sources representing 90 percent of the area source emissions of the 30 hazardous air pollutants that present the greatest threat to public health in the largest number of urban areas. Together, the Residual Risk Standards and the Urban Area Source Standards ensure protection of public health beyond that achieved by implementation of the MACT standards for major sources.

S/L Directors, RC

COPY FOR TOM R. MIKE H

RETURN ORIGIN TO MIE

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
RESEARCH TRIANGLE PARK NC 27711

JUN 26 1995

cc Mistry Jim Alan Paul K Sitemi S. Return Hope,

'95 MAY 31 PM 12 07

OFFICE OF AIR QUALITY PLANNING AND STANDARDS

MAY 16 1995

RECEIVED
MAY 19 1995
AIR AND RADIATION DIVISION
U.S. EPA, REGION V

MEMORANDUM

SUBJECT: Potential to Emit for MACT Standards -- Guidance on Timing Issues

FROM: John S. Seitz, Director
Office of Air Quality Planning and Standards (MD-10)

TO: Linda Murphy, Region I
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- In the case of facilities with two or more sources in different source categories: If such a facility is a major source for purposes of one MACT standard, is the facility necessarily a major source for purposes of subsequently promulgated MACT standards?

EPA plans to follow this guidance memorandum with rulemaking actions to address these issues. The Agency intends to include provisions on potential to emit timing <u>in future MACT</u> rules and amendments to the section 112 general provisions. The EPA believes that the structure of section 112 strongly suggests certain outer limits for when a source may avoid a standard through a limit on its potential to emit. However, EPA also believes the statute may be flexible enough to allow the Agency

to reach different results through rulemaking. In forthcoming rulemaking, EPA will be considering alternative approaches that could garner additional environmental benefits and provide additional flexibility to small sources.

TIMING FOR OBTAINING POTENTIAL TO EMIT RESTRICTIONS: GUIDANCE FOR PROMULGATED STANDARDS

Existing sources

Today's guidance clarifies that facilities may switch to area source status at any time until the "first compliance date" of the standard. The "first compliance date" is defined as the first date a source must comply with an emission limitation or other substantive regulatory requirement (i.e., leak detection and repair programs, work practice measures, housekeeping measures, etc..., but not a notice requirement) in the applicable MACT standard. By that date, to avoid being in violation, a major source must either comply with the standard, or obtain and comply with federally enforceable limits ensuring that actual and potential emissions are below major source thresholds.

The Act does not directly address a deadline for a source to avoid requirements applicable to major sources through a reduction of potential to emit. However, a result that is consistent with the language and structure of the Act is that sources should not be allowed to avoid compliance with a standard after the compliance date, even through a reduction in potential to emit. In the absence of a rulemaking record supporting a different result, EPA believes that once a source is required to install controls or take other measures to comply with a MACT standard, it should not be able to substitute different controls or measures that happen to bring the source below major source levels.

Moreover, while some standards have multiple, staggered compliance dates, these requirements are intended to function in an integrated manner to meet the statutory goals for that source category. For such a standard, the relevant date for purposes of this policy is the first substantive compliance date. While the Act may permit exceptions to these general rules, any such exceptions will need to be developed through rulemaking.

Some have read the Act to require an even earlier deadline, namely, the date of standard promulgation. EPA believes this result is not as strongly compelled by the statute. It is reasonable to presume that Congress intended a source to have some opportunity to avoid a standard by becoming an area source once it has been identified as subject in a promulgated standard.

The compliance date deadline approach would give small emitters (i.e. facilities with actual emissions below the major threshold) time to limit their potential emissions rather than comply with major source requirements. Under this approach, a facility will have the same amount of time to comply whether it chooses to meet the standard or limit its potential to emit.

This compliance date approach for existing sources is also reasonable because it recognizes the circumstances that exist regarding MACT standards issued to date. States are in the process of developing additional mechanisms that can provide federally enforceable limits to sources. In addition, EPA rules have not previously specified when facilities may switch from major to area-source status to avoid MACT applicability. It would be inequitable to hold sources to a promulgation date deadline absent clear advance notice to sources of the full significance of that date. Although the Act gives EPA discretion to designate a deadline earlier than the first compliance date, this is most appropriately done through rulemaking in a manner that gives adequate notice to the regulated community. By contrast, any source should presume that the compliance date is the final date to establish its status as an area source, at least for purposes of that standard.

For clarity, the Agency wishes to note that as long as a facility does not qualify for treatment as an area source, the facility must comply with any applicable major source requirement under the Clean Air Act. Facilities in need to comply with additional limits to qualify as area sources will need to plan ahead to obtain the limits before compliance deadlines for major source requirements. Facilities should consult with State and local air agencies concerning the timing of any necessary submittal.

New sources

Section 112 requires new sources to comply with a MACT standard upon startup or no later than the promulgation date of the standard, whichever is later. As a legal matter, to avoid being in violation, a "potential" major source must either comply with MACT or obtain and comply with federally enforceable limits by this statutory deadline.

Therefore, the Agency advises that any new facility that would be a major source in the absence of federally enforceable limits must obtain and comply with such limits no later than the promulgation date of the standard or the date of startup of the source, whichever is later. For the same reasons articulated below with regard to existing sources, a new source that is major at the time of promulgation or startup will remain major for purposes of that standard.

Once In, Always In Interpretation

EPA is today clarifying that facilities that are major sources for HAPs on the "first compliance date" are required to comply permanently with the MACT standard to ensure that maximum achievable reductions in toxic emissions are achieved and maintained.

EPA believes that this once in, always in policy follows most naturally from the language and structure of the statute. In many cases, application of MACT will reduce a major emitter's emissions to levels substantially below the major thresholds. Without a once in, always in policy, these facilities could "backslide" from MACT control levels by obtaining potential-to-emit limits, escaping applicability of the MACT standard, and increasing emissions to the major-source threshold (10/25 tons per year). Thus, the maximum achievable emissions reductions that Congress mandated for major sources would not be achieved. A once in, always in policy ensures that MACT emissions reductions are permanent, and that the health and environmental protection provided by MACT standards is not undermined.

> Example: A facility has potential emissions of 100 tons/year. After compliance with the applicable MACT standard, which requires a 99 percent emissions reduction, the facility's total potential emissions would be 1 ton/year. Under today's guidance, that facility could not subsequently operate with emissions exceeding the maximum achievable control technology emission level. The facility could not escape continued applicability of the MACT standard by obtaining "area source" status through limitations on emissions up to the 10/25 ton per year major source thresholds.

Additionally, the Act requires all major sources to obtain a Part 70 operating permit. Section 501(2) provides that any source that is major under section 112 will also be major under title V. It follows that a source that is major for purposes of any MACT standard will be subject to title V as a major source. As clarification, most MACT standards explicitly require operating permits for major sources. However, this principle applies regardless of whether it is specified in the particular standard. Therefore, a source required to comply with MACT requirements applicable to major sources will also be required to obtain a Part 70 permit for that MACT requirement.

APPLICABILITY OF MULTIPLE MACT STANDARDS TO A SINGLE FACILITY

A facility that is subject to a MACT standard is not necessarily a major source for future MACT standards. For example, if after compliance with a MACT standard, a source's potential to emit is less than the 10/25 tons per year

applicability level, the EPA will consider the facility an area source for purposes of a subsequent standard.

> EXAMPLE: A facility has degreasing operations which emit 30 tons per year of HAP. The same facility also has the potential to emit 5 tons/year of HAP from the coating of miscellaneous metal parts. After complying with the Halogenated Solvent Cleaning MACT, the maximum potential emissions from degreasing operations is 3 tons per year. The total federally enforceable potential emissions from this facility would now be 8 tons per year which meets the definition for an "area source." Therefore, this facility would not be subject to the major source requirements of the future miscellaneous metal parts MACT standard.

It should be noted that EPA has authority to require additional reductions in toxic emissions from sources that avoid MACT requirements through reductions in potential to emit. Section 112(f), the residual risk program, requires EPA to evaluate the risk and to promulgate additional standards for each category or subcategory of major sources, and allows EPA discretion to do the same for area sources, where there is not an ample margin of safety to protect public health within 8 years after promulgation of the MACT standard. The EPA will consider whether residual risk standards are appropriate for sources complying with MACT standards or potential to emit limits.

In addition, EPA is committed to implementation of the urban area source program as required in Section 112(c)(3) of the CAA. This program requires EPA to issue air toxics standards for area sources representing 90 percent of the area source emissions of the 30 hazardous air pollutants that present the greatest threat to public health in the largest number of urban areas. Together, the Residual Risk Standards and the Urban Area Source Standards ensure protection of public health beyond that achieved by implementation of the MACT standards for major sources.

FINAL MACT STANDARDS

40 CFR 63 Subpart	Source Type	Pollutant	Effective Proposed	Guidance Documents	General Info.
L	Coke Oven Batteries	Emissions	10/27/93 12/04/92	See: Ed Wojo, Region V 312-886-6785	
M	Perc Dryclean	Perchloro ethylene	09/22/93 12/09/91	FR,SS,IN, PP,Amend, IF,TC,FS, Qax2,RCRA USEPA,CR	
A	General Provision	HAP's	03/16/94 08/11/93	FR	
F,G,H,I	HON	112 Chems	04/22/94 12/31/92	FR,Amend, FS,SS	
Q	Indust. Process Cooling Towers	Hexvalent Chromium (banned from use)	09/08/94 08/12/93	FR,Amend, FS,TM,	
T	Halogen-ated Solvent Degreaser	MC,PCE,CT TCE,CHCL3 111TCA	12/02/94 11/29/93	IF,SS,TC, FR,FS	
O	Comercial Sterili-zation & Fumiga-tion	Ethylene Oxide	12/06/94 03/07/94	FR,TC,SS,	
N	Hard & Deco Electropl ating & Anodizing Tanks	Hexvalent & Trivalent Chromium	01/25/95 12/16/93	FR,FS,SS, IF,TC,IN	

R	Gasoline Distrib (Stage I)	HAP's	12/14/94 02/08/94	FR,Amend,	
EE	Magnetic Tape Manufact.	HAP's	12/15/94 03/11/94	FR	
W	Epoxy Resins & Non-Nylon Polyamide Prod. II	Epichlor o-hydrin	03/08/95 05/16/94	SS,	
X	Secondary Lead Smelters	HAP'S	06/23/95 05/31/94		
CC	Petroleum Refinries	HAP's	08/18/95 6/30/94	FR,Amend,	
GG	Aerospace Manufact. & Rework	HAP'S	09/01/95 06/06/94	FR	
Y	Marine Tank Vessel Loading & Unloading	VOC's & HAP's	09/19/95 05/13/94		
II	ShipBldg & Repair	HAP's	12/06/94		
DD	Off-site Waste & Recovery	HAP'S Table 1. Chemicals	10/13/94		
JJ	Wood Furniture Manuf.	HAP's	12/07/95 11/21/94	FR	

SS = Summary Sheet
IN = Intial Notification Report
PP = Polution Prevention Compliance
CR = Compliance with Control Requirements
Amend = Federal Register of Rule Amendment/correction
IF = Inspection Form
TC = Terms & Conditions
FS = Fact Sheet
QA = Questions & Answers (x2 = two Q&A's)
RCRA = Hazardous Waste issues
USEPA = Federal guidance
FR = Federal Register where final rule was published

TM = Test Method(s)

Proposed MACT

KK	Printing & Publ	3/14/95
S	Pulp & Paper	12/17/93
	Polymers & Resins Grp 1	6/12/95
	Polymers & Resins GRP 4	3/29/95

MACT, CTG, NSPS, ACT AND TITLE I RULE SCHEDULES**

MACT STANDARD	Proposal	Final
Asbestos MACT/GACT	*1/24/95***	11/95***
Asbestos Litigation	*1/1/93	***
Ferroalloys	4/96	7/97
Flexible Polyurethane Foam	8/96	7/97
Gasoline Distribution	*12/8/95	5/96
Haz. Waste Inc.	4/96	4/97
Mineral Wool	4/96	10/97
Off-site Waste & Recovery	*10/13/94	6/96
Oil & Gas Production	4/96	9/96
Pharmaceutical Production	6/96	1/98
Polymers & Resins I	*6/12/95	7/96
Polymers & Resins III	Schedule under revision	
Polymers & Resins IV	*3/15/95	5/96
Portland Cement	4/96	11/97
Primary Aluminum Prod.	3/96	11/96
Primary Copper Smelting	7/96	8/97
Printing/Publishing	*3/1/95	5/96
Pulp & Paper (combustion)	*2/27/95	8/96
Pulp & Paper (non-comb.)	*10/29/95	8/96
Secondary Aluminum Prod.	8/96	10/97
Shipbuilding (coatings)	*11/22/94	*12/15/95
Steel Pickling-HC1 Process	5/96	5/97
Wood Furniture Coating	*11/21/94	*12/7/95
Wood Treatment	Proposal to be delisted	
Wool Fiberglass Mfg.	6/96	10/97

CTG ****	Proposal	Final
Aerospace Coatings	3/96	4/97
Industrial Wastewater	*12/29/93	*****
Shipbuilding (coating)	*12/6/94(BACM)	*****
Offset Lithography	*11/93	*****
Plastic Parts Coating	*****	*****
VOL Storage	*12/93	*****

ACT	Final
Plywood/Particle Board (PM10)	Schedule Under Dev.

NSPS	Proposal	Final
Cold Cleaning	*9/9/94	9/96
Degreaser NSPS	*8/31/94	on Hold
Elec. Utility Gen. Rev. (NOx)	*5/30/94	12/96
Landfill NSPS & 111(d)	*5/30/91	3/12/96
Med. Waste Inc. NSPS & 111(d)	*2/27/95	4/96
Mun. Waste Combustors II & III	*9/20/94	*12/19/95
NOx NSPS Revision (407(c))	*11/31/95	11/97
SOCMI Sec. Sources NSPS	*8/31/94	3/96
Starch Mfg. Industry NSPS	*8/31/94	on Hold

Other Rules	Proposal	Final
Arch./Ind. Coatings (§183e)	3/96	9/96
Auto Refinishing (§183e)	*9/5/95	3/96
Consumer Products List (§183e)	*8/31/95	*9/29/95
Household Consumer Products	3/96	9/96
Haz. Waste TSDF, Phase II (RCRA)	*7/22/91	*12/6/94
Haz. Waste TSDF Phase III (RCRA)	Schedule under revision	

NOTE:
* Indicates date completed
@ Indicates on a court ordered deadline
** All schedules are tentative and subject to change without notice. Only those rules with proposal or promulgation dates within one year are included. Completed rules are removed from list after six months.
***Schedule to be determined by litigation/negotiation
****ACT's were issued for most CTG categories in April 1995
*****Final CTG cancelled or no plans to finalize

CTC ASSISTANCE

No cost assistance to staff of State and Local agencies and EPA Regional Offices on air pollution control technology issues.

CTC HOTLINE: CALL (919) 541-0800 to access EPA expert staff for consultations, references to pertinent literature, or access to EPA technical data and analyses. No question is too simple! Our Fax numbers are (919) 541-0242 or (919) 541-0361. E-Mail: blaszczak.bob@epamail.epa.gov.

ENGINEERING ASSISTANCE PROJECTS: If you need in-depth assistance concerning a specific control technology problem, call the HOTLINE or write the CTC. EPA staff and contractors are available for short-term projects such as review of proposed or existing control technology applications. Projects are subject to CTC Steering Committee approval.

TECHNICAL GUIDANCE PROJECTS: If the CTC receives a number of similar HOTLINE calls or a joint request from a group of agencies, the CTC Steering Committee may undertake broad, long-term projects of national or regional interest. The result may be a control technology document for a particular type of source, microcomputer software, or seminars and workshops.

CTC BBS: Call (919) 541-5742 for up to 14400 baud modem to access the CTC Bulletin Board. Set communications parameters to 8 data bits, N parity, and 1 stop bit, and use a terminal emulation of VT100, VT102, or ANSI. You may leave HOTLINE requests, order documents, suggest projects, and download software. The BBS is part of the OAQPS Technology Transfer Network (TTN). Voice Help Line (919) 541-5384.

FEDERAL SMALL BUSINESS ASSISTANCE PROGRAM (FSBAP): Call the CTC HOTLINE to access the FSBAP or use the FSBAP BBS on the TTN. (See the CTC BBS for connection information.) The CTC is the focal point for coordination of efforts among the four EPA centers participating in the program. The Federal program is intended to support State Small Business Assistance Programs, as required by the Clean Air Act.

RACT/BACT/LAER CLEARINGHOUSE (RBLC): The RBLC data base (BLIS) is available on the OAQPS TTN BBS. (See the CTC BBS for connection information.) The Clearinghouse provides summary information for control technology determinations made by permitting agencies.

GLOBAL GREENHOUSE GASES TECHNOLOGY TRANSFER CENTER (GGGTTC): Call the CTC HOTLINE to access GGGTTC information greenhouse gas emissions, prevention, mitigation, and control strategies.

OhioEPA
State of Ohio Environmental Protection Agency

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zarus Government Center
2 S. Front Street
Columbus, Ohio 43215

TELE: (614) 644-3020 FAX: (614) 644-2329

DAPC Section Managers:

Please share the attached memo from Laura Powell with your staff.

Thank you,
Bob Hodanbosi

MEMO

Route AQM&P Staff
Return - Hopkins

TO: Division Chiefs and Assistant Chiefs
District Chiefs and Assistant Chiefs

cc: Deputy Directors
Director's Office

FROM: Laura Powell, Chief, Legislative Affairs

DATE: December 1, 2000

RE: **Legislative Communication**

The purpose of this memo is to restate Ohio EPA's policy regarding legislative communication as well as the format for all written legislative correspondence. *Please review this information carefully and share it with your staff.*

It is important to note that in January 2001, due to term limits, we will have over 40 new legislators in the General Assembly. This turnover will present a significant challenge to our legislative office and to the Agency as a whole. Kristin Helmick, Tracy Freeman, and I will be attempting to meet all the new members as quickly as possible after the new year. However, please be aware that these new legislators are not likely to be familiar with Ohio EPA or with our protocol for handling legislative inquiries. We ask for your assistance and diligence in this time of major transition.

Because of the potential for increased contacts by new legislators to agency staff, it is most important that any communication received from a legislative office (oral or written) be reported to either Kristin,Tracy, or me. We appreciate the efforts most staff make to keep the legislative office "in the loop." However, there are still instances where we hear from legislators or their staff about direct involvement with Ohio EPA staff on issues that have not been brought to our attention. There have also been cases where Agency staff cc: legislators on correspondence without our prior notification. It is vital that Kristin, Tracy and I be made aware of (and have input on) these communications in order to ensure that we, as an agency, are being responsive and consistent. Please realize that the legislative office is here to assist and relieve your staff from having to communicate directly with legislators as the situation warrants.

Weekly reports sent to the Director are not an efficient or effective way for us to track specific legislative issues. In terms of reporting legislative contacts or providing updates on ongoing legislative issues, we would greatly appreciate separate notification -- e-mails are fine. Please let us know who you talked to, the facility or issue(s) prompting the call, what response was provided, and if follow up is required.

In terms of written correspondence, please note the following guides to preparing letters for signature:

- If you or your staff receive a letter (from a citizen, company, etc.) with a legislator on the cc: list, please do not automatically cc: the legislator on your response unless requested by our office. It is unnecessary and potentially confusing to cc: legislators when they have not requested this response. If you would like to cc: our office (with a copy of the original letter) we will keep it on file in case a legislator asks. If you feel it is important to cc: legislators on a particular response, we'd be happy to do so with a separate cover letter explaining why we are sending it.

- Two minor drafting reminders that would prevent delays if corrected—first, we see no reason to send legislative responses Certified Mail. Please do not put this on the top of draft responses. Second, our legislative office is the contact to reference at the close of every legislative response. Please do not reference division or district staff. If we are contacted, we will follow up with staff for additional information. This particular issue continues to delay legislative MCRs when they arrive here for sign-off and only the closing sentence needs to be changed. The format to use is as follows:

  "I hope this information is helpful to you. If you have additional questions or concerns regarding this matter, please feel free to contact Kristin Helmick or Tracy Freeman of my legislative staff at (614) 644-2782."

- Kristin Helmick primarily coordinates and signs-off on written legislative responses. She is more than happy to work with you or your staff to ease the burden of these letters. Please feel free to e-mail her draft responses (which will speed things up if changes are necessary), call her with formatting or protocol questions, or contact her with any concerns you may have about expected delays, etc.

If you have any questions about my expectations regarding legislative communication, please feel free to contact me. As you well know, we rely on you and your staff for your assistance and expertise on many issues of interest to legislators, and we *thank you* for your assistance and cooperation.

OhioEPA
State of Ohio Environmental Protection Agency

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MAILING ADDRESS:
P.O. Box 1049
Columbus, OH 43216-1049

MEMO

TO: Division Chiefs and Assistant Chiefs
District Chiefs and Assistant Chiefs

cc: Deputy Directors

FROM: Laura Powell, Chief, Legislative Affairs

DATE: June 1, 2000

RE: **Legislative Communication**

The purpose of this memo is to restate Ohio EPA's policy regarding legislative communication as well as the format for all written legislative correspondence.

Any communication received from a legislative office (oral or written) needs to be reported to either Kristin Helmick or me. We appreciate the efforts most staff make to keep the legislative office "in the loop." However, there have been instances where Agency staff have cc'd legislators on correspondence without our prior notification. We also hear from legislators or their staff about direct involvement with Ohio EPA on issues that have not been brought to our attention. It is vital that Kristin and I be made aware of (and have input on) these communications in order to ensure that we, as an agency, are being responsive and consistent. Please realize that the legislative office is here to assist and relieve your staff from having to communicate directly with legislators as the situation warrants.

In terms of reporting, please provide us with a quick e-mail to let us know who called, when they called, what was said and if follow-up is needed. Weekly reports sent to the Director are not an efficient or effective way for us to track specific legislative issues.

In terms of written correspondence, please note:

- If you or your staff receive a letter (from a citizen, company, etc.) with a legislator on the cc: list, please do <u>not</u> automatically cc: the legislator on your response unless requested by our office. It is unnecessary and potentially confusing to cc: legislators when they have not requested this response. If you would like to cc: our office (with a copy of the original letter) we would keep it on file in case a legislator asks.

- Two minor drafting reminders that would prevent delays if corrected—first, we see no reason to send legislative responses Certified Mail. Please do not put this on the top of draft responses. Second, our legislative office is the contact to reference at the close of every legislative response. Please do not reference division or district staff. If we are contacted, we will follow up with staff for information and pass that along to the legislative office.

- Kristin Helmick primarily coordinates and signs-off on written legislative responses. She is more than happy to work with you or your staff to ease the burden of these letters. Please feel free to e-mail her draft responses (which tends to speed things up down the road if changes are necessary), call her with formatting or protocol questions, or concerns you may have about delays, etc.

If you have any questions about my expectations regarding legislative communication, please feel free to contact me. As you well know, we rely on you and your staff for your assistance and expertise on many issues of interest to legislators, and we thank you for your assistance and cooperation.

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Columbus, OH 43216-1049

MEMORANDUM

TO: All Chiefs
FROM: Chris Snider, Asst. to the Director
RE: Formatting Correspondence
DATE: March 30, 1999

In an effort to assist you in preparing documents for the Director's signature, I have attached a sample format that your staff should use as a guideline.

Some other suggestions that will help facilitate the Director's signature include making sure you include a thorough briefing memo on the subject at hand and carefully reviewing the document for typographical and grammatical errors. Using the spell check function in word processing is always helpful, but please remember that spell check does not differentiate between correctly spelled words i.e. "toxics and tonics." Documents should be single-sided and should not be presented for signature on tattered or coffee stained letterhead. As far as a time line for moving your document through the system, please remember that some documents may require sign off from more than one deputy director and the assistant director before going to the director for his consideration. If you have something that needs to move through the system quickly, please don't hesitate to call me and I will help "walk" the document through the necessary signatures to the best of my ability to help you meet your deadline.

All documents for signature must be logged into the Director's Office computerized tracking system. If a logged in document is returned to you for revision, please DO NOT resubmit it with a new sign off sheet. You should resubmit the original sign off sheet with your revised document.

Lastly, the director requires all official comments for the record, made on behalf of Ohio EPA, to be approved by the Director's Office. This is especially important with regard to comments solicited by USEPA on rulemaking and other related programmatic concerns. Comment letters must be prepared for the director's signature.

I hope this information is helpful to you. Following these guidelines should help reduce the number of times that documents need to be returned to you for revisions. Please feel free to call me at 4-2782 with any questions or concerns you may have.

Thank you.

George V. Voinovich, Governor
Nancy P. Hollister, Lt. Governor
Donald R. Schregardus, Director

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SAMPLE - NOT FOR RELEASE

March 23, 1999

The Honorable John Doe
1432 Longworth House Office Building
Washington DC 20515-3505

Re: Lexmark Drinking Water

Dear Congressman Doe:

Thank you for your letter of November 17, 1998 regarding a serious drinking water problem at Lexmark.

I appreciate the plight of the families affected by the loss of water from their wells. Staff of the Ohio Environmental Protection Agency have visited some of the homes to offer what assistance they could in evaluating the problem.

Representatives of executive branch agencies sit on the board and I will gladly forward copies of your correspondence to them with a request for their timely consideration.

Sincerely,

Christopher Jones
Director

cc: Jennifer Tiell, Assistant Director
Pat Madigan, Deputy Director

Attachment

CJ/cmw

EPA 1617 (rev. 1/95)
Printed on Recycled Paper

George V. Voinovich, Governor
Donald R. Schregardus, Director

OhioEPA
State of Ohio Environmental Protection Agency

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Columbus, OH 43216-1049

(Arial font, no less than 12 pitch)

Date (No less than 3 returns from top, more if room permits)

Address (No less than 3 returns from date)

Re: (subject line here if applicable)

Salutation (Dear _____:)

Body of letter - Full justification (block to left and right)

Sincerely,

Christopher Jones (At least 3 returns - 4 if room permits)
Director

cc's here

Any attachments/enclosures here

Initials here (CJ/)

EPA 1617 (rev. 1/95)
Printed on Recycled Paper

George V. Voinovich, Governor
Donald R. Schregardus, Director

CANTON CITY HEALTH DEPARTMENT
DIVISION OF AIR POLLUTION CONTROL
420 MARKET AVENUE NORTH
CANTON, OHIO 44702

FAX: (216) 489-3335

TELEFAX TRANSMITTAL

DATE: 7-21-94

FOR THE ATTENTION OF: MISTY PARSONS

FIRM: OHIO EPA AIR NSR

FAX NUMBER: 9-1-614-644-3681

RE: PERMITS FOR MINING

This transmission consists of 3 pages including this page.

Please notify us if you do not receive all the pages at (216) 489-3385.

FROM: DAN SCHILTZ

THIS AIR LINES CAME OUT IN LATE 1980'S. I THINK OHIO EPA ALSO CAME OUT WITH A MEMO ABOUT NO PERMITS NEEDED FOR OIL + GAS WELLS.

ADMINISTRATION

Acid Rain

We have attached a new issue of the air fact sheet on acid rain prepared by Bill Spires. This is good recent information which can help you respond to the public's general interest in acid rain. Thanks Bill.

CAA changes

Several bills are under active consideration in Congress which would amend the CAA. Changes contemplated include a new O_3/CO control plan, air toxic's and acid rain. Becky Blood of the Governor's Ohio office is following these issues closely and recently visited the agency to update us. Director Shank will be in Washington in May to meet with USEPA officials and the Congressional delegation to be briefed on current issues and raise certain agency concerns.

Region V news

Director Shank and deputies Rich Sahli and Maury Walsh will be in Region V on Thursday and Friday of this week. Thursday will be DSHWM and Friday DAPC. Pat Walling will join them on Friday for an all day discussion of air issues including a meeting with Val Adamkus. We are pleased to have this much time given to Ohio by Region V to update each other.

Personnel

We have a full house! All positions are filled except for a newly established EE-1 for Right to Know activities. This position will set up administrative procedures for handling the influx of information due to the agency on July 1, 1988, concerning toxic air emission and mass balance calculations. Interviews have been conducted for this job.

We filled both QA jobs in the past two weeks as well as the supervisor slot in the AQMPS for NESHAPS.

AIR QUALITY MODELING & PLANNING

New Source Review - Best Available Technology (BAT) Determination

Ohio EPA has recently received a number of applications for permits to install (PTI's) replacement storage tanks at bulk plants located in rural counties. BAT has been determined to be submerged filling and control with a vapor balance system while transferring gasoline from a delivery vessel to the stationary storage tank. The transfer of kerosene, fuel oil and diesel fuel into the stationary storage tank must be done through a submerged fill pipe installed within six inches of the bottom of the storage tank.

New Employee

Tom Hadden has joined the AQM&P Section to be in charge of the Hazrdous Pollutant Control Group. He will be supervising the activities of the air toxics control program, NESHAP, and Section 313 of SARA. Tom was formerly employed with Ohio EPA in the Division of Water Pollution Control.

Permit to Install Requirements for Mineral Extraction

Ohio EPA has received two permit to install applications for mineral extraction that includes coal strip mining. Because strip mining is regulated by the DNR, Ohio EPA does

not require these operations to obtain permits to install. However, new coal washing and/or coal preparation plants must obtain a permit to install. Any PTI applications or portions of a PTI application for coal strip mining should be returned to the applicant.

Toxic Inventory

Just a reminder; the local air agencies and district offices should be in the process of mailing surveys to facilities for the compounds that were contained on the Battelle list of toxic, but not on the original list mailed to facilities. These compounds and their ranking (Battelle) are: 8. Nickel, 11. Mercury, 17. Trichloroethylene, 20. Polychlorinated Biphenyls (PCBs), 22. Epichlorohydrin, 27. Aniline

USEPA NO_2 Increments Proposal

On February 8, 1988 USEPA proposed to incorporate NO_2 air quality increments into the PSD program. Comments were due April 8, 1988. Attached for your information are ALAPCO's and Ohio EPA's comments on the USEPA proposal.

ENGINEERING

Stack Test Review Summary Form Tracking:

Please find attached, the stack test review form tracking update for the 2nd quarter of 1988 (SFY). Certain field offices need to increase the percentage of review forms submitted in a timely manner. Please work toward increasing this percentage for the 3rd quarter. If you're having problems getting facilities or test firms to submit the final test reports within the required time frame, please inform this office so these facilities or firms can be contacted and reminded of their obligation.

Also attached for your use is an updated version of the stack test review summary form. The form has been redesigned to facilitate data input to the stack test clearinghouse. Since the form provides all the information utilized in the clearinghouse database, it will no longer be necessary for field offices to submit copies of the stack test reports (except where necessitated by special situations or enforcement actions); however, we would still appreciate receiving any observer's reports, printouts of test results (M5) or visible emission readings associated with the test summary.

EER Summary Tracking:

The EER summary tracking update for the 4th quarter of 1987 is attached for your information. We would like to commend those field offices who put forth the extra effort to ensure that all their EER summaries were submitted in a timely manner. We hope this level of effort can be maintained during the upcoming quarters. Only two (2) field offices kept us from having an exceptionally high performance level.

Twinsburg (NEDO) Smoke School:

The schedule and registration form for Twinsburg's spring smoke school are attached for your information. Please contact Fred Long or Dennis Bush for additional information (216-425-9171).

CEM Audits:

The Ohio EPA, in conjunction with the U.S. EPA/Region 5 and Entropy Environmentalists, will be conducting performance audits on 9

OhioEPA
State of Ohio Environmental Protection Agency

P.O. Box 163669, 1800 WaterMark Dr.
Columbus, Ohio 43216-3669
(614) 644-3020
FAX (614) 644-2329

George V. Voinovich
Governor

May 10, 1995

Matthew F. Johnston
Corporate Engineer
Environmental Affairs
Worthington Industries
1205 Dearborn Drive
Columbus, Ohio 43085

Dear Mr. Johnston:

This is in response to your letter of March 1, 1995 in which you have requested that air contaminate sources (150 injection molding machines in the State of Ohio) that are presently required to obtain permits to install be exempted. Specifically, you are requesting that the Agency provide guidance in interpreting the applicability of Ohio Administrative Code (OAC) rule 3745-31-03(A)(l) and (m).

In order to respond to your request we spent some time reviewing the existing regulation and some of the background documentation which was used to develop the exemptions. This review did not give us much additional insight on the intention of the exemptions for plastic molding operations. However, the exemption rule it self is relatively clear in its language. As such, our interpretation of the rules are as follows.

Under OAC rule 3745-31-03(A)(1)(k), the rule exempts "equipment used for compression and injection molding of plastics...". The exemption does not apply to equipment which "requires an outside source of heat that either liquifies or caused sublimation or equipment which "requires the use of organic compounds as mold release agents". Our interpretations of this rule is just as it says - if an source of heat is used, than the exemption does not apply. If an <u>organic compound</u> is used as a mold release, then the exemption does not apply.

In the case you supplied, an electric heater was used (an outside source or heat) and, therefore, the exemption does not apply.

We also believe that if any mold release is used, then the exemption does not apply. Non organic compound mold releases can be used and the exemption would apply.

We believe that the "presses" exemption would be interpreted the same way.

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As you pointed out, emissions from some injection molding machines and plastics presses could be very small. Some of these could be significant sources depending upon the amount of heat supplied, the vaporization characteristics of the plastic and the amount and type of mold release compound used. Because of the possibility of significant emissions it would not be appropriate to exempt all of these machines.

However, is your case the machines may have emissions small enough to qualify for other exemptions. Specifically, Ohio has a "less than 10 pounds per day" exemption which might apply to these sources. I recommend that you look closely at this rule to see if it will exempt any of your sources. It can be found under OAC rule 3745-15-05(A).

If you have any questions, please contact Alan Lloyd of my staff at (614) 644-3613.

Sincerely,

Robert Hodanbosi
Chief
Division of Air Pollution Control

RH/all

cc: Brad Miller, SWOAPCA
Gerry Rich, NWDO
Alan Lloyd, DAPC
Mike Hopkins, DAPC

c:\save\worth.mj

OEPA inter-office communication

.o: Distribution date: October 1, 1996

from: Mike Hopkins, AQM&P, DAPC

subject: PTI Modeling during the application review

The purpose of this memo is to clarify who should:

1. conduct air pollution modeling (both major modeling and minor modeling); and

2. who should review the modeling.

The questions of when modeling is required and how modeling should be done have been answered in the most recent version of the modeling policy (currently June 1995).

Who should conduct "Major Modeling"?

Major modeling is defined as any modeling required under major New Source Review (PSD, nonattainment review) or any refined modeling where the Screen model is not used. Most major modeling should be completed by the applicant. Field offices that have the experience to run the ISC models may do so in order to support/check major New Source Review modeling submitted, or to provide ISC runs when screen models fail to show ompliance. These ISC runs are at the option of the field office staff and must be done in accordance with the DAPC modeling policy. If additional model runs are needed for a major New Source Review package they should normally be completed by the applicant.

Who should conduct "Minor Modeling"?

Minor modeling is defined as modeling required by the Air Toxics Policy, for pollutants under our state Modeling Policy (NAAQS and toxics), or similar modeling where Screen model is used. Field office staff should use their best judgement to decide when to require companies to do their own modeling. This judgement should be based on what is best for the customer. Typically, large facilities with significant environmental staff will choose to do their own modeling in order to:

1. have more control over the various modeling options; and

2. to expedite the permitting process by saving us from having to do the modeling.

For smaller facilities, or those without the expertise to do the Screen modeling, the DO/LAA should do the minor modeling (with Central Office assistance as needed). An exception to this should be for cases where there are many sources, or the modeling is fairly complex. In these cases, it is appropriate for the company to hire someone to do the modeling rather han relying on us. The new SBA program may be able to assist qualifying small businesses by doing some modeling for them. Again, field office staff should guide facilities to help them decide which option is best.

When it is appropriate for the Ohio EPA to do minor modeling, the DO/LAA

staff should do this work, not the Central Office staff. All DO/LAA offices have been provided training concerning the use of the Screen models. It is best to have DO/LAA staff do this modeling because it is better to find out as early in the review process as possible whether or not a source passes this requirement. When you receive an application, this is one item you should consider early in your review, as soon as you have determined the emission rates.

Who should review major modeling?

This should be decided on a case-by-case basis by the AQM&P modeling unit. Most major modeling should be reviewed by the Central Office modeling staff. This has been the case with PSD PTI modeling in the past. In some cases, where the DO/LAA staff has developed the expertise, and with the modeling unit's agreement, DO/LAA staff can conduct this review.

Who should review minor modeling?

This review should be conducted at the DO/LAA level. DO/LAA staff should include a copy of the Screen model runs with the worksheet they submit to Central Office. Calculations should also be attached showing that the modeling passes the Air Toxics policy MAGLC or is less than ½ the increment for NAAQS. If this information is not provided, Central Office staff will return the worksheet to the DO/LAA.

We are very willing to answer any modeling related questions that come up, so please contact us. We realize that there are questions that arise which will likely require our assistance (such as, whether or not Screen is the appropriate model for multiple sources in a certain case, whether terrain should be included and what can be suggested to the applicant if they fail). If you do not feel confident in the basics of running the model, we can assist you in learning this as well. Bill Spires is the primary Modeling Policy contact. You can also pose questions to your NSR contact person at CO at (614) 644-2270. Thank you.

DISTRIBUTION

Don Waltermeyer, NWDO	Bob Goulish, NEDO	Phil Hinrichs, SWDO
Sam Araj, NWDO	Dennis Bush, NEDO	César Zapata, CDO
Fred Klingelhafer, SEDO	Glen Greenwood, SEDO	Tim Wilson, RAPCA
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Sherry Swihart, AQM&P	Jim Orlemann, Engineering	Tom Rigo, FO
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NOVAA Modeling Discussion
Agenda
February 7, 1996

Topics we cover

General Modeling

Description
Inputs
Outputs

Accuracy, Validity, Limitations

New Source Review Requirements

Major: PSD, Non-attainment

State-only permits
- toxics
- 1/2 PSD increment
- NAAQS

Special Modeling (can we require it, what do the results mean?)
- Enforcement
- Verified Complaints
- Permit Renewal

Source data....source characterizations
- Field offices responsibility for review

Downwash and GEP buildings

Flat, Simple and Complex terrain

Toxics; What policy?

Urban vs Rural

Non traditional sources (rain caps, window vents, etc)

Definition of Ambient Air

Fugitives and/or uncaptured emissions - Model or not

SCREEN and TSCREEN hands on; Current projects??

Input/Output Examples

George V. Voinovich, Governor
Nancy P. Hollister, Lt. Governor
Donald R. Schregardus, Director

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Areas where we will be revising the Guidance

Combined concentration target and significant emissions table

Most current version vs specific model numbers

volume source guidance

SCREEN settings and work sheets

TSCREEN settings to mimic SCREEN

additional rain cap guidance and other special emission types

Effective date of BAT changes (toxic modeling requirement changes)

Issues such as BAT extending to existing emissions at a modified source

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are also limited. Although some variations may be found, it is believed that there are five major types of plume behavior,[23] and these are shown schematically in Fig. 5.1, along with

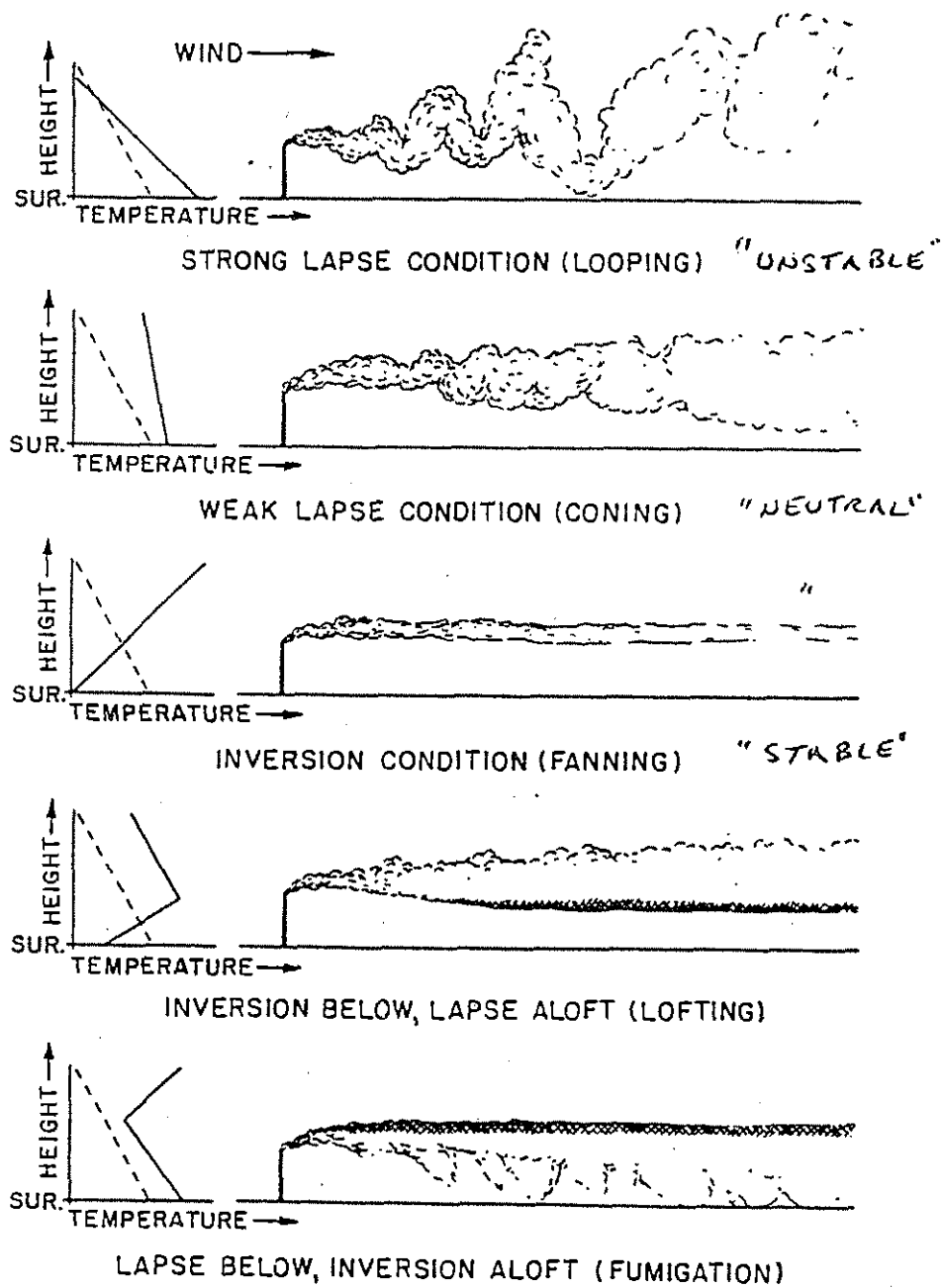


Fig. 5.1—Schematic representation of stack gas behavior under various conditions of vertical stability. ---, dry adiabatic lapse rate.

the general form of vertical temperature

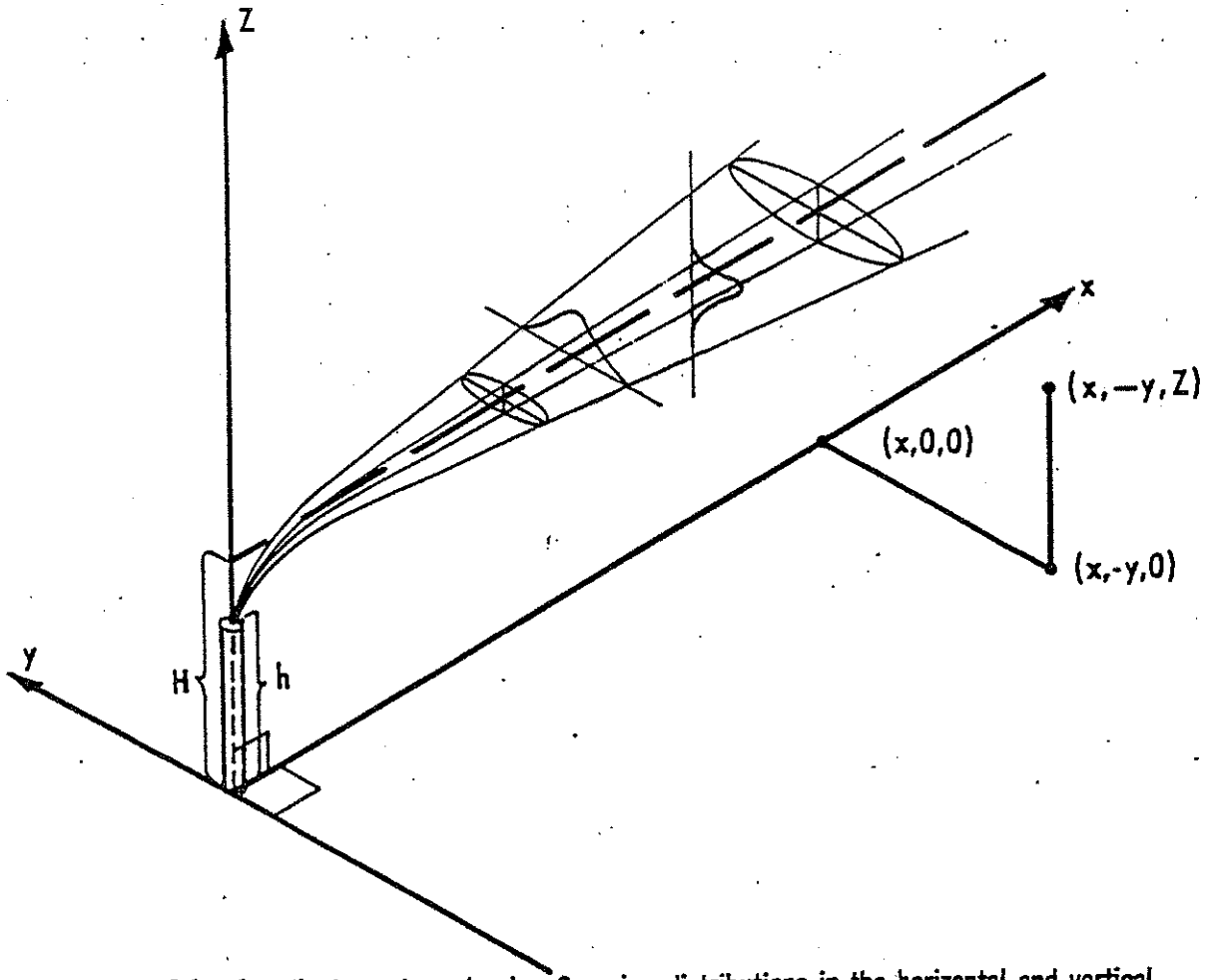


Figure 3-1. Coordinate system showing Gaussian distributions in the horizontal and vertical.

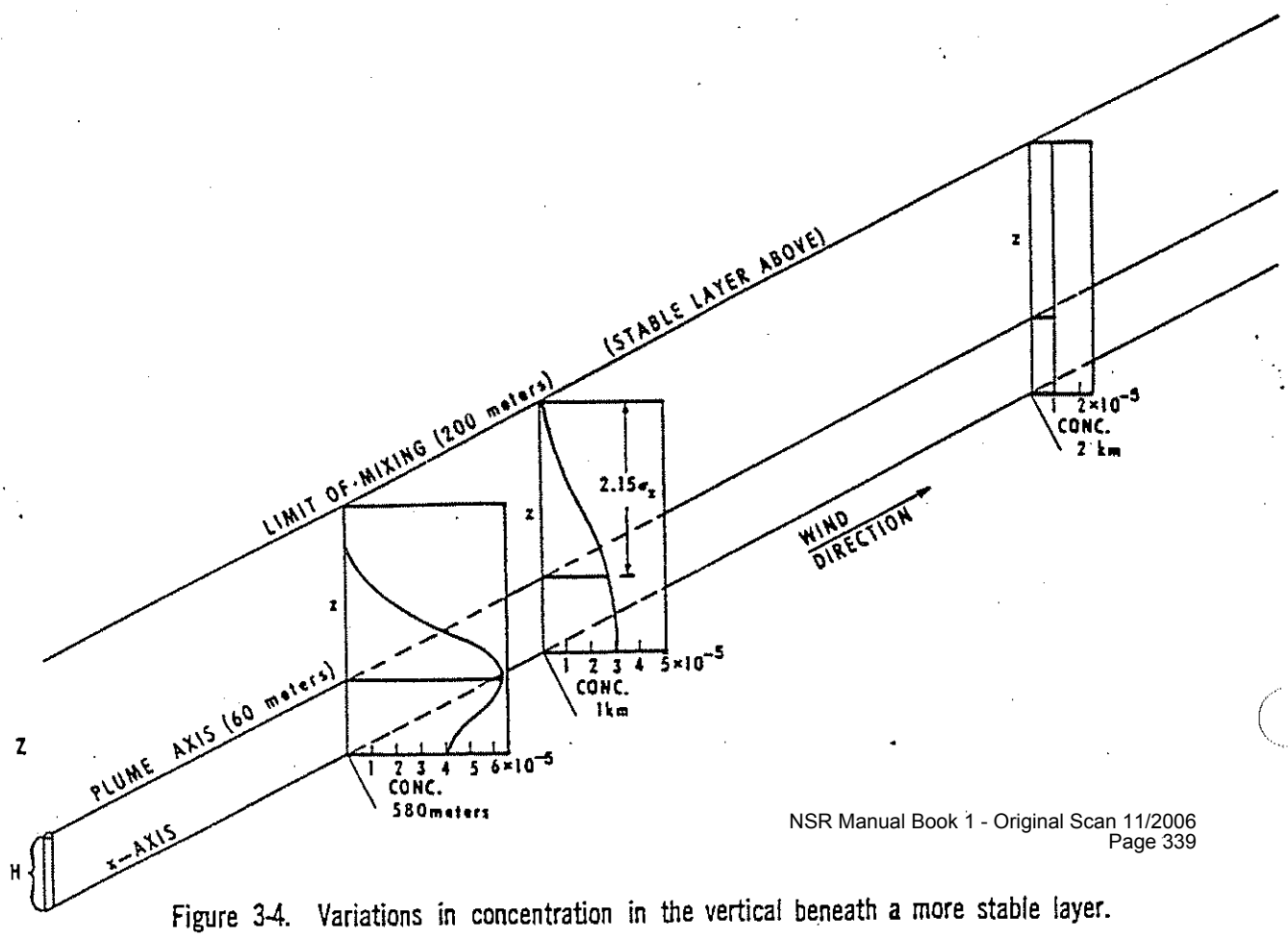
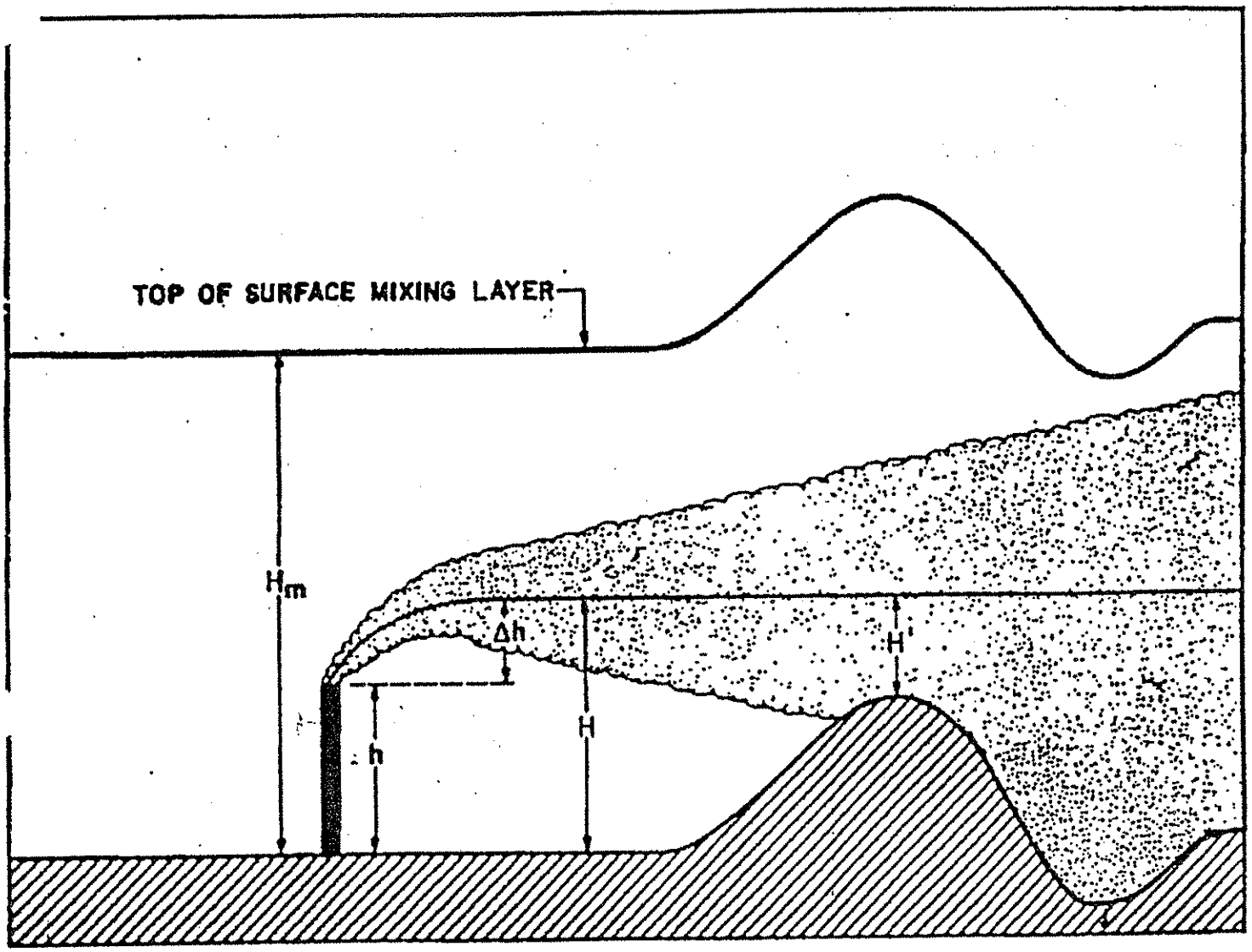
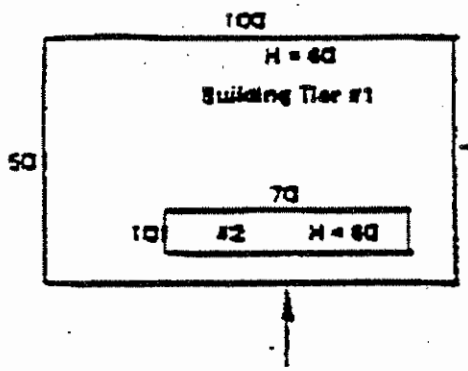


Figure 3-4. Variations in concentration in the vertical beneath a more stable layer.


TOP OF SURFACE MIXING LAYER
H_m
Δh
H'
H
h



Height of wake effects is $H_w = H + 1.5\ L_B$ where L_B is the lesser of the height of the width.

East and west wind:

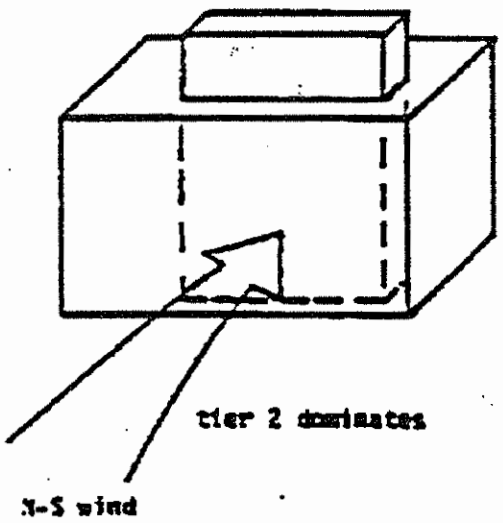
$$H_{W1} = 60 + 1.5(50) = 135$$
$$H_{W2} = 80 + 1.5(10) = 95$$

Therefore, the lower building tier #1 width and height (H = 60, W = 50) are used

North and South wind:

$$H_{W1} = 60 + 1.5(60) = 150$$
$$H_{W2} = 80 + 1.5(70) = 185$$

Therefore, the upper building tier #2 width and height (H = 80, W = 70) are used



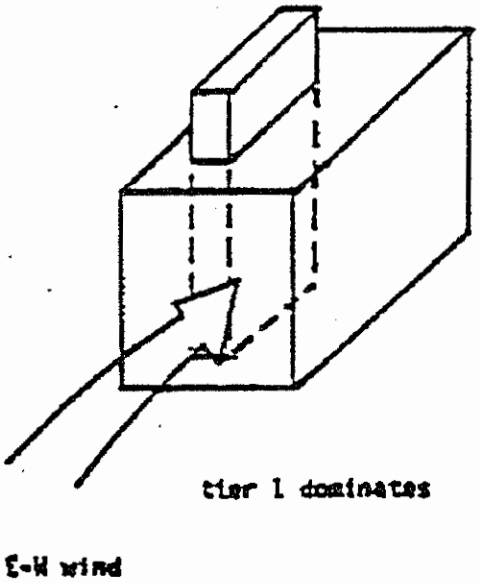


FIGURE 1-2. ILLUSTRATION OF TWO TIERED BUILDING WITH DIFFERENT TIERS DOMINATING DIFFERENT WIND DIRECTIONS

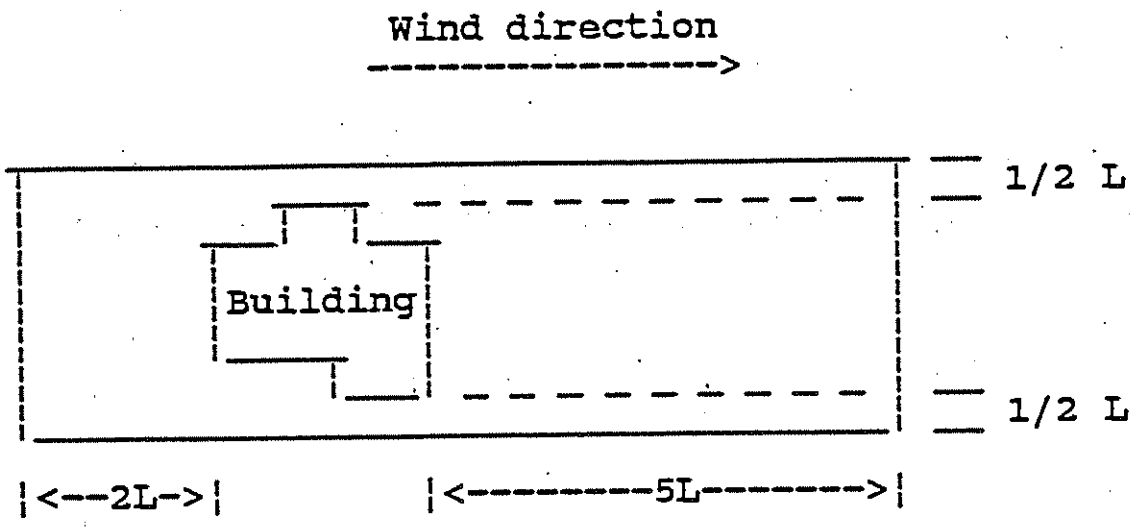
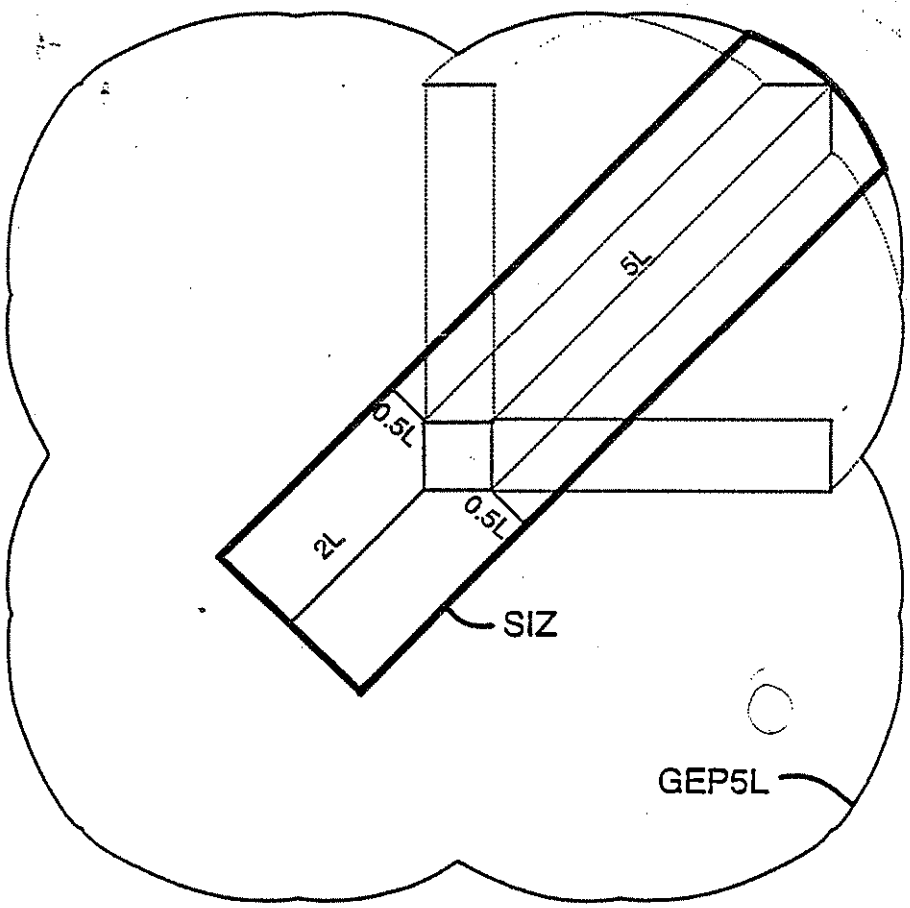


Figure 1

Plan View of Area of Influence of Building Wake Effects



The influence zone around a tall building is clearly not a describable shape in EPA's new BPIP.

Permit Application Guidance for New Air Pollution Sources

IMPACT TO PARKS

John Bunyak

National Park Service
Air Quality Division
P.O. Box 25287
Denver, CO 80225-0287

Natural Resources Report NPS/NRAQD/NRR-93/09

March 1993

United States Department of the Interior
National Park Service
Natural Resources Publication Office
Denver, Colorado

The National Park Service, Air Quality Division, is responsible for preserving, protecting, and enhancing air quality and air quality-related values in the national park system by ensuring compliance with the requirements of the Clean Air Act and the National Park Service Organic Act. Air quality-related values include visibility, flora, fauna, cultural and historical resources, odor, soil, water, and virtually all resources that are dependent upon and affected by air quality. The Air Quality Division monitors air quality in park units; reviews permit applications for proposed major emitting sources, air quality legislative and regulatory proposals, and NPS and other federal or state air quality plans; develops data on sensitive park resources; researches acid deposition and its impacts; and develops meteorological and atmospheric dispersion modeling methodologies.

The National Park Service disseminates reports on high priority, current resources management information, with managerial application for managers, through the Natural Resources Report Series. Technologies and resource management methods; "how to" resource management papers; proceedings on resource management workshops or conferences; natural resources program recommendations; and descriptions and resource action plans are also disseminated through this series. Documents in this series usually contain information of a preliminary nature and are prepared primarily for internal use within the National Park Service. This information is not intended for use in open literature.

Mention of trade names or commercial products does not constitute endorsement or recommendation for use by the National Park Service.

Copies of this report are available from the following:

Publications Coordinator
National Park Service
Natural Resources Publication Office
P.O. Box 25287 (WASO-NRPO)
Denver, CO 80225-0287

As the nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally owned public lands and natural and cultural resources. This includes fostering wise use of our land and water resources, protecting our fish and wildlife, preserving the environmental and cultural values of our national parks and historical places, and providing for enjoyment of life through outdoor recreation. The department assesses our energy and mineral resources and works to ensure that their development is in the best interests of all our people. The department also promotes the goals of the Take Pride in America campaign by encouraging stewardship and citizen responsibility for the public lands and promoting citizen participation in their care. The department also has a major responsibility for American Indian reservation communities and for people who live in island territories under U.S. administration.

NPS D-799 March 1993

Permit Application Guidance for New Air Pollution Sources

John Bunyak

Natural Resources Report NPS/NRAQD/NRR-93/09

United States Department of the Interior • National Park Service · Air Quality Division

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Acknowledgements

I gratefully acknowledge the assistance of the National Park Service, Air Quality Division staff, especially Tonnie Maniero, John Notar, and Bud Rolofson of the Permit Review Team, in supplying information and comments on the document, and Christine Schumacher for her excellent clerical support in preparing this document.

Purpose

This document provides guidance to persons intending to submit a Prevention of Significant Deterioration (PSD) of Air Quality permit application for a new major source or major modification to an existing source, the emissions from which have the potential to impact a class I area managed by the National Park Service (NPS) or the U.S. Fish and Wildlife Service (FWS). This document also identifies to permitting authorities the NPS and FWS contacts, and provides NPS and FWS personnel background information on the PSD process and information and analysis requirements. In addition to this document, permit applicants should also use a copy of the Environmental Protection Agency (EPA) draft New Source Review Workshop Manual (Environmental Protection Agency 1990). The EPA manual describes all aspects of the PSD review process in detail.

> Questions regarding the EPA manual, which was revised in October 1990, should be directed to the Environmental Protection Agency, New Source Review Section (919) 541-5591.

Under a memorandum of agreement with the U.S. Fish and Wildlife Service, the National Park Service, Air Quality Division, provides technical review of PSD permit applications that may affect FWS class I areas. Therefore, the guidance in this document also applies to both NPS and FWS class I areas.

For areas of the national park system, the National Park Service Organic Act of 1916 requires conserving resources "unimpaired for the enjoyment of future generations." The Clean Air Act of 1970, as amended in 1977, charges the federal land manager (FLM) with an affirmative responsibility to protect the air quality-related values of designated class I areas from adverse impact. Much of the information that the National Park Service and the U.S. Fish and Wildlife Service need to carry out these statutory responsibilities must be collected by the applicant well before the PSD permit application is submitted.

> By delegation of authority from the secretary of the interior, the assistant secretary for Fish and Wildlife and Parks is the federal land manager for areas under NPS and FWS jurisdiction.

By following the guidance in this document, an applicant can prevent delays in the review process that are caused by an incomplete application and can obtain useful information from the National Park Service. For example, the National Park Service may provide the applicant with air quality and visibility data, data regarding ecological resources, and lists of NPS park-specific or FWS refuge-specific resources that are known to be sensitive to air pollution. Finally, although much of the discussion in this document pertains to class I areas, resources that are sensitive to air pollution may also exist in class II federal lands. Consequently, the federal land manager is concerned about potential impacts on class II sensitive resources as well.

Statutory Requirements Applicable to Class I Areas

Clean Air Act

In 1970, Congress passed the Clean Air Act, establishing a national policy toward protecting and enhancing air quality (42 *United States Code* (USC) 7401 *et seq)*. Upon amendment in 1977, the act became an important tool in protecting air quality and sensitive resources in national parks and national wilderness areas. The Clean Air Act Amendments of 1990 (Public Law No. 101-549) retained and enhanced the park and wilderness protection provisions (e.g., visibility studies and transport commissions).

Sections 160-169A of the act established the PSD program to protect the quality of the air in regions of the United States in which the air is cleaner than that required by the federal National Ambient Air Quality Standards.

> One of the purposes of the PSD program is "to preserve, protect, and enhance the air quality in national parks, national wilderness areas, national monuments, national seashores, and other areas of special national or regional natural, recreational, scenic, or historic value."

Under the PSD provisions, Congress developed a classification approach for controlling the increase of air pollution in those areas of the country with air quality better than the National Ambient Air Quality Standards. Class I areas are afforded the greatest degree of air quality protection. Very little deterioration of air quality is allowed in these areas. Moderate deterioration, associated with well-managed industrial growth, is allowed in class II areas, while more deterioration is allowed in class III areas. In no case, however, may pollution concentrations violate any of the National Ambient Air Quality Standards.

Congress designated certain areas as mandatory class I. This designation precludes reclassifying these areas to a less protective category.

The 1990 amendments clarified that class I area boundaries are to conform to boundary changes in the underlying park or wilderness area. The national park system includes 48 mandatory class I areas, and the national wildlife refuge system contains 21 mandatory class I areas.

Mandatory class I areas include the following areas that were in existence as of August 7, 1977:

1. international parks
2. national wilderness areas and national memorial parks in excess of 2,024 ha (5,000 acres)
3. national parks in excess of 2,428 ha (6,000 acres)

(42 USC 7472)

NPS-administered class I areas are shown on a map in Appendix A, and FWS-administered class I areas on a map in Appendix B.

The states and, in some cases, Indian tribes can redesignate lands in accordance with section 164 of the Clean Air Act. Certain class II areas, however, may not be redesignated to class III. These class II "floor" areas include national wildlife refuges, wild and scenic rivers, lakeshores and seashores in excess of 4,047 ha (10,000 acres), and newly established national parks and wilderness areas in excess of 4,047 ha (10,000 acres). As with class I areas, the 1990 amendments clarify that the boundaries of class II floor areas are to conform to the boundaries of the underlying areas. All other clean air areas of the country were initially designated by the Clean Air Act as class II, and can be redesignated as either class I or class III.

Section 164(d) required the federal land manager to review all national monuments, primitive areas, and preserves, and to recommend for redesignation to class I any appropriate class II areas possessing air quality-related values as important attributes. The recommendations, with supporting analyses, were provided to Congress and the affected states and Indian tribes with authority for redesignation. These recommendations, published in the June 25, 1980, *Federal Register* (FR) (45 FR 43002) are listed in Appendix C.

Air quality-related values include visibility, odor, flora, fauna, and geological resources; archeological, historical, and other cultural resources; and soil and water resources.

Major sources of air pollution that propose to build new, or significantly modify, existing facilities in areas of the country with pollutant concentrations below the National Ambient Air Quality Standards (clean air regions) are subject to certain requirements generally designed to minimize air quality deterioration. Where emissions from new or modified facilities may affect class I areas, set aside by Congress for their pristine air quality or other natural, scenic, recreational, or historic values potentially vulnerable to air pollution, the act imposes special requirements to ensure that the new and existing pollution will not adversely affect such areas. In addition, Congress gave the federal land manager, and the NPS park superintendent or FWS refuge manager who is charged with direct responsibility for managing class I areas, an affirmative responsibility to protect all those values of an area that may be affected by changes in air quality. They are also to consider, in consultation with the permitting authority (the Environmental Protection Agency or the state), whether a proposed major emitting facility will have an adverse impact on such values.

The Clean Air Act establishes several tests for judging a proposed facility's impact on the clean air regions in general, and on the class I areas in particular. One such test is the PSD increment test. PSD increments represent the small amount of additional pollution that Congress thought, as a general rule, could be allowed in each classified area (class I, II, or III). Currently, area-specific increments have been established for particulate matter, sulfur dioxide, and nitrogen dioxide.

For class II areas, the permitting authority will not grant a permit if the proposed emissions would cause, or significantly contribute to, exceeding a class II increment. All PSD applicants must provide an analysis of the impairment to visibility, soils, and vegetation that would occur as a result of the proposed source, as well as an analysis of commercial, residential, industrial, and other growth associated with the source.

For class I areas no permit will be issued if an increment would be exceeded, unless the major emitting facility can convince the permitting authority and the federal land manager that no adverse impact to air quality-related values would occur. Congress realized, however, that in certain instances, sensitive air quality-related resources could be adversely affected at air pollution levels below the class I increments, or by pollutants for which increments do not exist.

Therefore, the act requires a determination of whether proposed emissions from a proposed major emitting facility would have an adverse impact on the air quality-related values, including visibility, of a class I area. If the federal land manager demonstrates to the satisfaction of the permitting authority that proposed emissions would adversely affect the air quality-related values of a class I area, even though the proposed facility would not cause or contribute to pollutant concentrations that exceed the class I increments, then the permitting authority may not authorize the proposed project.

Preventing future impairments is to be accomplished, in a large measure, through the new source permit review process.

The adverse impact test is critical for proposed facilities with the potential to affect a class I area.

Congress also determined that visibility in mandatory class I areas required additional protective regulations. Section 169A sets, as a national goal, preventing of any future, and remedying of any existing, man-made visibility impairment in mandatory class I areas. The act requires that reasonable progress be made toward the national goal. In accordance with section 169A, the Environmental Protection Agency promulgated visibility regulations on December 2, 1980 (40 *Code of Federal Regulations* (CFR) 51 subpart P) that require those states with mandatory class I areas to submit implementation plans that ensure preventing of future and remedying of existing visibility impairment. All mandatory class I areas where visibility is an important value were identified in the November 30, 1979, *Federal Register* (44 FR 69122). The list includes all NPS and FWS class I areas.

To remedy existing visibility impairment, Congress mandated states to establish regulations requiring, among other things, major stationary sources that were in existence for 15 years or less on August 7, 1977, be retrofitted with controls representing the best available retrofit technology, if those sources cause or contribute

to impairing visibility in a mandatory class I area. This emission limitation is to be established on a case-by-case basis, taking into account such considerations as available technology and the costs of compliance.

Organic and Wilderness Acts

In addition to the Clean Air Act of 1970, the National Park Service Organic Act of 1916 (16 USC 1, *et seq.*) and the Wilderness Act of 1964 (16 USC 1131, *et seq.*) guide the protection of park and wilderness areas. The general mandates of the Organic Act state that the National Park Service will

> promote and regulate the use of . . . national parks . . . by such means and measures as conform to the fundamental purpose of the said parks, . . . which purpose is to conserve the scenery and the natural and historic objects and wildlife therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations (16 USC 1).

The 1978 amendments to the Organic Act further clarify the importance Congress placed on protecting park resources, as follows:

> The authorization of activities shall be construed and the protection, management, and administration of these areas shall be conducted in light of the high public value and integrity of the National Park System and shall not be exercised in derogation of the values and purposes for which these various areas have been established, except as may have been or shall be directly and specifically provided by the Congress (16 USC 1a-1).

The Wilderness Act defines wilderness as

> an area where the earth and its community of life are untrammeled by man, where man himself is a visitor who does not remain . . . an area of undeveloped Federal Land retaining its primeval character and influence . . . which is protected and managed so as to preserve its natural conditions (16 USC 1131(c)).

The Wilderness Act also states that wilderness areas will be devoted to the public purposes of recreational, scenic, scientific, educational, conservation, and historical use.

Role of Federal Land Manager in PSD Permit Review Process

Background

As indicated previously, the federal land manager and NPS park superintendent and FWS refuge manager have an affirmative responsibility under section 165 of the Clean Air Act to protect the air quality-related values of class I areas. One process used to meet this responsibility is reviewing permit applications for new and modified sources that may impact class I lands. The FLM role in the PSD permit review process and the information that the federal land manager requires to review the permit application are discussed in this section.

> The primary regulations that affect new major sources and major modifications are the Prevention of Significant Deterioration regulations (40 CFR 52.21).

Federal Land Manager Notification

General

Section 165 of the act requires the Environmental Protection Agency or the state permitting authority to notify the federal land manager if emissions from a proposed project may impact a class I area. This notification includes the applicant's PSD application, which allows the federal land manager to review the application concurrently with the permitting authority. The Environmental Protection Agency provided guidance on FLM notification as follows.

Generally, the permitting authority should notify the federal land manager of all major facilities proposing to locate within 100 km (62 miles) of a class I area. In addition, the permitting authority should notify the federal land manager of very large sources proposing to locate at distances greater than 100 km (62 miles). These sources also may affect class I increments or the air quality-related values of a class I area due to the quantity or type of air emissions or the presence of certain meteorological conditions.

To minimize delays in the PSD permit review process, the federal land manager also encourages preapplication meetings with states and permit applicants to discuss air quality concerns for a specific class I area in question. Given preliminary information, such as the source's location and the types and quantity of projected air emissions, the federal land manager can discuss specific air quality-related values for an area and advise the applicant as to the level of analysis needed to assess potential impacts on these resources.

> The federal land manager may request notification of major sources beyond 100 km (62 miles) in special circumstances (e.g., when increments are exceeded, or adverse impacts have been documented, or when resources are known to be sensitive).

The permitting authority should forward PSD applications to the federal land manager for review and analysis as soon as possible after receipt. For national park system areas, the application should be sent to the National Park Service, Air Quality Division, Policy, Planning and Permit Review Branch, and notice should be provided to the NPS regional director and park superintendent. If a national wildlife refuge is involved, the application should be sent to the U.S. Fish and Wildlife Service, Air Quality Branch, and notice provided to the FWS regional director and the refuge manager. Appropriate addresses are given in Appendixes D and E.

Visibility

As required by the visibility protection provision of the Clean Air Act, additional procedural requirements apply when a proposed source has the potential to impair visibility in a class I area (40 CFR 52.27 (d)). Specifically, the permitting authority (a state or the Environmental Protection Agency) must, upon receiving a permit application for a source that may affect visibility in any class I area, notify the federal land manager in writing.

Such notification should include a copy of all information relevant to the permit application, including the proposed source's anticipated impacts on visibility in a class I area. The permitting authority should also notify the federal land manager within 30 days of receipt of any advance notification of any such permit application.

> The federal land manager must be notified in writing within 30 days of receiving the permit application and at least 60 days before any public hearing on the application.

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Additional procedural requirements apply if the federal land manager notifies the permitting authority of a finding that the proposed source may adversely impact visibility in a class I area, or may adversely impact visibility in an integral (scenic) vista which may have been identified by a state for a class I area. If the permitting authority agrees with the federal land manager's finding that visibility in a class I area may be adversely affected, the permit may not be issued. However, if the permitting authority agrees with the federal land manager's adverse impact finding regarding integral vistas, the permitting authority may still issue a permit if the emissions from the source are consistent with reasonable progress toward the national goal of preventing or remedying visibility impairment. In making this decision, the permitting authority may take into account the costs of compliance, the time needed for compliance, the energy and non-air quality environmental impacts of compliance, and the useful life of the source.

> If the permitting authority does not agree with the federal land manager's finding, in the public hearing notice for the project, the permitting authority must either explain its decision or indicate where the explanation can be obtained.

Generally, the federal land manager will make a preliminary determination regarding possible adverse visibility impacts within 30 days of receipt of all relevant information. The permitting authority should consult with the federal land manager on the completeness of a permit application, and to officially notify the federal land manager as soon as the application is considered complete.

Federal Land Manager Review of Applications

The FLM review of a PSD application for a proposed project that may impact an NPS or FWS class I area consists of three main analyses:

1. a best available control technology (BACT) analysis to ensure that the emission increases from the proposed project are minimized

2. an air quality analysis to ensure that the pollutant levels do not exceed ambient air quality standards and PSD increments

3. an air quality-related values analysis to ensure that the class I area values (i.e., visibility, flora, fauna, etc.) are not adversely affected by the proposed emissions

Each of these analyses is described in detail.

Best Available Control Technology Analysis

The applicant should conduct the BACT analysis using a top-down approach. In brief, a top-down process ranks all available control technologies in descending order of control effectiveness. The applicant first examines the most effective, or top, alternative. That alternative is established as the best available control technology unless the applicant demonstrates, and the permitting authority agrees, that technical considerations, or energy, environmental, or economic impacts justify a conclusion that the most stringent technology is not achievable in that case.

> The permit applicant must perform a case-by-case BACT **analysis that considers environmental**, energy, and economic impacts for each regulated pollutant emitted in significant amounts.

If the most stringent technology is eliminated in this fashion, then the next most stringent alternative is considered, and so on. Permit applicants should refer to chapter B of the EPA New Source Review Workshop Manual for a detailed discussion of the top-down policy.

> Note: The Environmental Protection Agency is reviewing its top-down policy, and this policy may be revised. However, regardless of the outcome of this review, permit applicants should carefully evaluate all air pollution control options more efficient than that proposed as the best available control technology in their BACT analysis.

The federal land manager reviews the applicant's BACT analysis to determine if the best available pollution control technology is being proposed, thereby minimizing the proposed emission increases and their corresponding impact on a class I area in question. If the federal land manager disagrees with the applicant's BACT analysis, technical comments are submitted to the permitting authority who has the ultimate responsibility to make the BACT determination and issue the permit.

The environmental impacts analysis is not to be confused with the air quality impact analysis discussed later. The environmental impacts analysis of the BACT review should concentrate on impacts other than ambient air quality impacts of the regulated pollutant in question, such as solid or hazardous waste generation, discharges of polluted water from a control device, visibility impacts, or emissions of unregulated pollutants. Thus, the fact that a given control alternative would result in only a slight improvement in ambient concentrations of the pollutant in question when compared to a less stringent control alternative should **not** be viewed as a basis for rejecting the more stringent control alternative.

Regarding the economic impact analysis, given the special protection class I areas are afforded under the Clean Air Act, the federal land manager believes that the need to minimize potential impacts on a class I area should be a major consideration in the BACT determination for a project proposed near such an area. Therefore, if a source proposes

to locate near a class I area, additional costs to minimize impacts on sensitive class I resources may be warranted, even though such costs may be considered economically unjustified under other circumstances.

> If a permit applicant wants to locate a source near a class I area, the federal land manager contends that the applicant should be expected to do more to reduce emissions than an applicant proposing to locate elsewhere.

Air Quality Analysis

General. The permit applicant must also perform an air quality analysis for each pollutant subject to PSD review. This analysis should show the contribution of the proposed emissions to the total PSD increment consumption and to the existing ambient pollution levels in a class I park or refuge. Because proposed sources are not yet operating, the air quality analysis must rely on mathematical dispersion models to estimate the air quality impact of the proposed emissions.

The applicant should base the air quality review on approved models and procedures as specified in 40 CFR 52.21(l) (*Guideline on Air Quality Models*, revised July 1986, Environmental Protection Agency 1986). All assumptions for the analysis should be explicitly stated, and sufficient information on modeling input should be furnished so that the National Park Service can validate and duplicate the model analysis.

The model must make maximum use of meteorological data as specified in the referenced *Guideline on Air Quality Models*. If analysis indicates that proposed emissions would cause, or significantly contribute to exceeding class I increments, the applicant may

1. apply better control technology; downsize, change emission-producing processes, or relocate the source; or obtain emission offsets such that the source (in conjunction with offsets) no longer contributes to increment exceedance

   or

2. demonstrate to the federal land manager that the estimated concentrations will not have an adverse impact on air quality-related values.

> Only option 1 is available to applicants if the proposed emissions would cause or contribute to exceeding a class II increment.

The applicant may discuss the air quality analysis methodology with the National Park Service, Air Quality Division, before performing the analysis to ensure that the dispersion model and meteorological data base chosen for the analysis will adequately predict the impact on a class I area and its values.

Misuse of Significant Impact Levels. In instances where cumulative impact analyses are lacking, permit applicants do not perform an analysis of the proposed source, plus all other PSD increment-consuming and background sources. The applicants often incorrectly claim that the proposed project would result in insignificant impacts, and therefore, no further analysis is required. Permit applicants generally cite two references to significant levels.

> One common problem with air quality analyses submitted for FLM review is the lack of cumulative impact analyses.

The first reference is the term "significant" as defined in the PSD regulations (40 CFR 52.21(b)(23)) and used in pollutant-specific PSD applicability determinations. A PSD review applies to new major stationary sources and major modifications to existing major stationary sources (40 CFR 52.21). A major modification is defined as any physical change or change in the method of operation of a major stationary source that would result in a significant net emissions increase of any pollutant subject to regulation under the Clean Air Act. The Environmental Protection Agency establishes significant emission rates individually for each regulated pollutant (40 CFR 52.21(b)(23)(i)).

Consistent with the special emphasis Congress has placed on class I areas in developing amendments to the Clean Air Act, more stringent criteria apply to modifications at major stationary sources located near class I areas. Any net emission increase of a regulated pollutant at a major stationary source that is located within 10 km (6.2 miles) of a class I area must be examined for impacts with an air quality modeling analysis. If the maximum predicted impact on the class I area exceeds 1 microgram per cubic meter ($\mu g/m^3$) on a 24-hr basis, the emissions increase is considered significant and constitutes a major modification subject to PSD review (40 CFR 52.21(b)(23)(iii)).

This 1 $\mu g/m^3$ significance level is to be used only for PSD applicability determination purposes.

This level is used to determine if a proposed modification at a source located within 10 km (6.2 miles) of a class I area is major, and therefore, subject to PSD review. This level should not be used to determine whether air quality impacts in class I areas are significant. Once a source is determined to be subject to PSD review, the federal land manager's responsibility is to determine if the proposed project would significantly impact a class I area. This determination is made on a case-specific basis, whereby the federal land manager may consider the existing air quality conditions, the sensitivity of the resources, and other relevant data.

The second reference to significance levels is discussed in the preamble to the Environmental Protection Agency PSD regulations (June 19, 1978), in terms of impacts to air quality (43 FR 26398 (1978)). In performing dispersion modeling analyses, the Environmental Protection Agency provides permit applicants with guidance in using the dispersion models. Generally, for PSD analyses in class II areas, the Environmental Protection Agency limits the application of air quality models to a downwind distance of 50 km (31 miles) due to limitations of the methods used to establish commonly used dispersion parameters. Also, since the air quality impact of many sources decreases rapidly with distance away from the sources, the Environmental Protection Agency usually extends the analysis of impacts of a source only to the point where the concentrations from the source fall below certain class II area significant impact levels. For example, the sulfur dioxide significance levels are 25, 5, and 1 $\mu g/m^3$ for the 3-hr, 24-hr, and annual averaging times, respectively.

The Environmental Protection Agency added, "since the 1977 amendments to the Clean Air Act provided special concern for class I areas, any reasonably expected impacts for these areas must be considered irrespective of the 50 km model limitation or the above significance levels."

Oftentimes, permit applicants use the 1978 significance levels as a screening tool to determine the level of detail necessary in the air quality analysis. They neglect the agency's caution that this approach does not apply when a proposed source could be reasonably expected to impact a class I area. For example, in non-class I situations, the significance levels are used to define the impact area of the proposed source. Accordingly, the impact area of a source is established by a circular area whose radius is equal to the greatest distance from the source to which approved dispersion modeling shows the proposed emissions will be at the significance levels. The permit applicant would then perform a cumulative modeling analysis that includes all air pollution sources affecting air quality in the impact area. Based on EPA guidance, if a proposed source is found to have no impact area (i.e., dispersion modeling demonstrates that proposed emissions will not exceed the referenced significance levels), further air quality analysis of that pollutant will generally not be required.

In the case of a class I area, however, an air quality analysis should be performed for each pollutant subject to review irrespective of the significance levels. This analysis should be cumulative, considering pollutant concentrations present in the class I area, the pollution contribution of sources permitted but not yet operating, and the concentration of pollutants contributed by the proposed source and any associated secondary growth.

The Environmental Protection Agency further clarified the use of significant impact levels in a September 10, 1991, policy memorandum from John Calcagni, Director of Environmental Protection Agency, Office of Air Quality Planning and Standards, Air Quality Management Division, to Thomas J. Maslany, Director of Environmental Protection Region III, Air, Radiation, and Toxics Division. Furthermore, although Mr. Calcagni's memorandum allows the state of Virginia to use alternative significant impact levels for class I increment analyses on a case-by-case basis, the memorandum prohibits their use for determining whether a source should conduct an adverse impact analysis for any air quality-related value in a class I area, or whether a source would have an adverse impact on a value.

> Mr. Calcagni makes it clear that the significant impact levels that the agency established for use in some cases (e.g., sulfur dioxide 24-hr impact of 5 μg/m³) were never intended to be used for evaluating impacts on the class I increments or values.

Mr. Calcagni concludes by stating, "a determination concerning the need for a full assessment of an air quality-related value is made by the Federal Land Manager based on an analysis of the proposed source's (and other cumulative) potential impacts on a value for that particular class I area. This analysis is independent of the inquiry into whether a proposed source would have a significant impact on any applicable class I increment."

The problem with using predetermined significant impact levels, from a resource impact standpoint, is discussed in detail later in the Air Quality-related Values Analysis section. However, the following discussion illustrates the problem with the misuse of these levels from a class I increment consumption perspective.

The class I 24-hr and 3-hr sulfur dioxide increments are 5 and 25 μg/m³, respectively. As indicated previously, the 24-hr and 3-hr significance levels cited in the preamble to the 1978 PSD regulations are also 5 and 25 μg/m³. Using significant levels that are equivalent to the respective class I increments makes little sense. Using these significance levels for class I areas would allow two insignificant sources, each contributing 4.99 μg/m³ (24-hr average), to cause concentrations nearly double the allowable class I increment, and yet both would be exempt from a detailed increment analysis.

Similarly, a source contributing 0.99 μg/m³ (24-hr average) at a class I area would consume nearly 20% of the class I increment, but still would be less than the 1 μg/m³ significant value cited in 40 CFR 52.21(b)(23)(iii), and would be exempt from detailed review. Applying the 5 μg/m³ or the 1 μg/m³ significance levels in these instances would preclude a cumulative impact analysis from being required, in essence, allowing potential class I increment violations. Using these levels would also preclude the federal land manager from making an informed decision regarding the potential impacts on a class I area resources. In addition, using a 24-hr significance level to determine the need for cumulative analyses may allow increment exceedances for the 3-hr or annual averaging times. In other words, the proposed source claiming to be insignificant (i.e., misapplying the 1 μg/m³ criteria) for the 24-hr averaging time could cause or contribute to increment violations for the 3-hr or annual averaging times.

> Some applicants and state permitting agencies have misinterpreted the EPA guidance, and have used either of the significance criterion even though a source is proposing to locate near a class I area.

In technical review comments to the permitting authority, the federal land manager points out this misuse of significance levels and requests that applicants perform both cumulative increment and ambient analyses to assess the total impacts on class I air quality. The federal land manager is considering a size and distance screening criteria for class I analysis. In the meantime, permit applicants should be aware of this problem, and to minimize potential delays in the permit review process should consult with the federal land manager to determine the need for, and extent of, detailed cumulative air quality impact analyses.

Modeling Distance Criteria. Regarding the distance limitation for using dispersion models in assessing class I area impacts, as referenced previously, although the Environmental Protection Agency limits the application of air quality models listed in the *Guideline on Air Quality Models, Appendix A*, to a downwind distance of 50 km (31 miles) in non-class I situations, any reasonably expected impacts for class I areas must be considered irrespective of the 50-km model limitation. Nevertheless, some state permitting agencies and permit applicants limit class I analyses to sources located within 100 km (62 miles) of a class I area.

> The possibility of impacts from sources located more than 100 km from a class I area has long been recognized in EPA guidance, and limiting analysis to an area within 100 km is inconsistent with this guidance.

For example, in the March 19, 1979, guidance memorandum regarding federal land manager notification of pending permit applications for major new sources, the Environmental Protection Agency states that

> notice should be provided [to the federal land manager] for any facility which will be located within 100 km of a Class I area. Very large sources, however, may be expected to affect air quality related values at distances greater than 100 kilometers. The appropriate Federal Land Manager should be notified if such impacts are expected on a case-by-case basis.

If the Environmental Protection Agency intended that the federal land manager be notified of certain projects located more than 100 km from a class I area, the potential impacts of these sources are to be assessed (i.e., modeled). In fact, the EPA *Guideline on Air Quality Models* also acknowledges the potential for impacts from more distant sources and indicates that the federal land manager should be consulted regarding the selection of an appropriate model to use in the analysis. Section 7.2.6. states in part that

> section 165(e) of the Clean Air Act requires that suspected significant impacts on PSD class I areas be determined. However, the useful distance to which most Gaussian models are considered accurate for setting emission limits is 50 km. Since in many cases class I areas may be threatened at distances greater than 50 km from sources, some procedure is needed to (1) determine if a significant impact will occur, and (2) identify the model to be used in setting an emission limit if the class I increments are threatened (models for this purpose should be approved for use on a case-by-case basis as required in Section 3.2). **This procedure and the models selected for use should be determined in consultation with the EPA Regional Office and the appropriate federal land manager** (emphasis added).

The notification and consultation requirements are consistent with, and incorporated into, the EPA New Source Review Workshop Manual, which has been widely disseminated to permitting agencies. This recent guidance supports modeling of major sources beyond 100 km, as indicated on page E.16 of the manual:

> Also, if a major source proposing to locate at a distance greater than 100 km is of such size that the reviewing agency or the federal land manager is concerned about potential emission impacts on a class I area, the reviewing agency can require the applicant to perform an analysis of the source's potential emissions impact on the class I area. This is because certain meteorological conditions, or the quantity, or type of air emissions from large sources locating further than 100 km, may cause adverse impacts on a class I area. A reviewing agency should not exclude a major new source or major modification from performing an analysis of the potential impacts if the federal land manager identifies some reason to believe that the source would affect a class I area.

The Environmental Protection Agency further clarified its guidance regarding class I area modeling in an October 19, 1992, policy memorandum from John S. Seitz, Director, Office of Air Quality Planning and Standards. Mr. Seitz states that "the Agency's position is that generally a 100 kilometer range is an acceptable modeling domain. However, impacts from large sources located at distances greater than 100 kilometers need to be considered when such impacts reasonably could affect the outcome of the Class I analysis." Mr. Seitz concludes that "circumstances may warrant consideration of other sources (initially using various screening techniques) which are located more than 100 kilometers from a Class I area. . . ." and the modeling protocols should be "determined on a case-by-case basis in consultation with the appropriate EPA Regional office and **Federal Land Manager**" (emphasis added).

Therefore, the federal land manager recommends that the analysis of increment consumption and impacts on air quality-related values not be limited to 100 km, but should include all increment-consuming sources and other large sources that could impact the class I area. In fact, such analysis is required by section 165(d)(2)(c)(i) of the Clean Air Act.

The federal land manager, on a case-by-case basis, may recommend that the applicant perform a refined modeling analysis using a long-range transport model. The use of long-range transport models requires the approval of the EPA regional office. Advances in the science of long-range transport modeling continue to result in more refined models being developed.

In appropriate cases, the federal land manager and the Environmental Protection Agency will recommend using these more refined long-range transport models to assess impacts beyond 50 km. The applicant should consult with the federal land manager before using a long-range transport model.

Air Quality-related Values Analysis

In addition to the control technology and air quality analyses discussed in the previous sections, the federal land manager's review of a PSD application includes an analysis of potential effects to class I area air quality-related values.

General. Air quality-related values (AQRV) are generally expressed in broad terms. The impacts of increased pollutant levels on some air quality-related values may be assessed by measuring specific parameters that reflect the status of these values. For instance, the projected impact on the presence and vitality of certain species of plants or animals may indicate the potential impact of pollutants on air quality-related values associated with species diversity, or with possible impacts on certain endangered species. Similarly, a value associated with water quality may be measured by the pH or acid neutralizing capacity of a water body, or by the level of certain nutrients in the water. The air quality-related values of various class I areas may differ, depending on the purposes and characteristics of a particular area. Also, the concentration at which a pollutant adversely impacts a value may vary among class I areas.

When evaluating the effects of air emissions from a proposed source on a class I area's air quality-related values, the federal land manager is not concerned solely with the proposed project's estimated air quality impact, but rather with the total pollutant concentration the air quality-related values will experience.

A cumulative air quality analysis in which the proposed source and any recently permitted (but not yet operating) sources in the area are modeled is an important part of any AQRV analysis. This total modeled concentration is then added to measured ambient levels in order to assess the effect of the anticipated ambient concentrations on air quality-related values. Without such an analysis, the total pollutant level to which the air quality-related values would be exposed cannot be esti-

mated, and the federal land manager cannot make an informed decision regarding potential impacts on the class I area resources. As required by law, the federal land manager's responsibility is to conserve and protect the resources for present and future generations.

Effects Versus Significant Impact Levels.

Frequently the AQRV analysis, which an applicant must prepare, lacks a cumulative analysis. As with the air quality analysis, applicants often use the EPA significance levels, discussed in the previous section, as guidance for assessing air quality impacts to air quality-related values. If the proposed emissions alone result in estimated concentrations below the EPA significance levels, applicants often conclude the proposed emissions will have an insignificant impact on class I area air quality-related values, and a cumulative modeling analysis is not performed. Again, this is misinterpreting the EPA guidance regarding significance levels.

> The Environmental Protection Agency did not intend using significance levels for sources locating near class I areas to be the only criterion in reaching this conclusion, and they deferred to the federal land manager to determine the need for a full assessment of impacts on air quality-related values.

Using the EPA significance levels, in an absolute sense, does not provide the assurance the federal land manager needs to be convinced that a particular class I area will be adequately protected. Therefore, an applicant should not conclude that just because an impact is less than the significant impact level for class I increments, that such an impact is insignificant with respect to effects on air quality-related values. However, the federal land manager believes the converse to be true. In other words, if an impact is considered significant with respect to a class I increment, it seems reasonable to conclude that such an impact is also significant with respect to effects on air quality-related values, especially in the case where air quality-related values are being adversely impacted by current air pollution levels (e.g., at Shenandoah and Great Smoky Mountains national parks).

The federal land manager's assessment of potential effects on air quality-related values considers the sensitivities of specific air quality-related values found in a class I area and the existing air pollution effects on these resources. Consequently, significance levels may differ depending on the conditions that currently exist at a particular class I area. If the threshold concentration for effects on sensitive class I area resources is being approached, a significant impact could possibly occur at concentrations below the EPA significance levels. Once the effects threshold is actually reached, any increase in class I area pollutant concentrations may be significant.

For example, the federal land manager has expressed concern that visibility, aquatic, and terrestrial resources at Shenandoah National Park, a class I area in Virginia, are currently being adversely impacted by air pollution (September 18, 1990, *Federal Register*, 55 FR 38403). The federal land manager also is concerned that the effects of additional emissions proposed for the area would contribute to, and exacerbate, the existing adverse effects and are, therefore, unacceptable. Consequently, the federal land manager recommended that no new major emission sources be permitted near Shenandoah National Park unless such sources would be assured of not contributing to the adverse impacts. The federal land manager expressed similar concerns about Great Smoky Mountains National Park, a class I area in Tennessee and North Carolina (February 5, 1992, *Federal Register*, 57 FR 4465).

As another example, because of the relatively high sulfur dioxide concentrations estimated at Theodore Roosevelt National Park, and the specific air quality-related values found at the park that are known to be sensitive to sulfur dioxide (e.g., lichens), the North Dakota State Department of Health and the federal land manager agreed that the 24-hr significance level for sulfur dioxide should be 0.2 $\mu g/m^3$ for proposed projects impacting the park. Pollutant concentrations at the park were below the effects threshold for lichens. As conditions change, based on scientific data, the significant impact level for Theodore Roosevelt National Park may even be lower for future applications.

Significance levels for air quality-related values must be based on scientific data on a case-by-case basis to reflect the particular facts and current knowledge in each situation over time. Therefore, the federal land manager recommends that permit applicants proposing to construct facilities that could potentially impact a class I area consult with the federal land manager to determine the specific sensitivities of air quality-related values and the requirements of the cumulative impact analysis in their PSD application.

Effects Versus Secondary National Ambient Air Quality Standards (NAAQS). Some applicants claim that a proposed source would not cause any adverse impacts on class I resources because emissions from the project would not cause or contribute to a violation of the secondary National Ambient Air Quality Standards that have been established to protect public welfare. Such a statement by the applicant is not acceptable. In fact, an express purpose of the PSD regulations is to protect public welfare from any actual or potential adverse effects, notwithstanding attainment and maintenance of all National Ambient Air Quality Standards.

The reasons for this distinction are clear. The NAAQS-setting process does not necessarily focus on the types of diversity of vegetation set aside for protection in national park areas or wildlife refuges. The secondary National Ambient Air Quality Standards are typically based primarily on effects on cash crops, such as wheat and tobacco, rather than sensitive park or refuge soils or vegetation. In addition, the secondary National Ambient Air Quality Standards are national levels that protect against effects from multiple and diverse sources. These standards do not necessarily provide adequate protection for sensitive species found in only certain areas of the country, and they do not address deposition effects or synergistic effects of multiple pollutants. Similarly, the secondary National Ambient Air Quality Standards do not adequately protect visibility, which is an important air quality-related value in most class I areas. In areas that are relatively pristine, small increases in pollutant concentrations can cause significant visibility degradation. For example, a 1 $\mu g/m^3$ addition of fine particulate matter in a clear atmosphere may reduce visual range by 30%. Therefore, as research continues to confirm, instances exist where adverse effects to air quality-related values can occur at levels below the secondary National Ambient Air Quality Standards.

A summary of the literature on the relevant air pollution effects for ozone, nitrogen oxide, and acidifying nitrates and sulfates is provided in the technical support document for the FLM adverse impact determination for Great Smoky Mountains National Park (U.S. Department of the Interior, National Park Service 1992, unpublished report). This document is accessible through the EPA new source review electronic bulletin board, or from the Air Quality Division.

Effects on Visibility. Regarding the visibility analysis, the federal land manager recommends that the applicant first use the VISCREEN model as recommended in the EPA *Workbook for Plume Visual Impact Screening and Analysis* (Environmental Protection Agency 1988), rather than the EPA original 1980 Visibility Workbook. To satisfy specific FLM needs with respect to impacts on the visual resources of NPS and FWS lands, the permit applicant should consider the following guidance in the visibility impact demonstration.

The federal land manager has consulted with the Environmental Protection Agency, Office of Air Quality Planning and Standards, regarding the background visual range values included in the VISCREEN model. Where available, these more appropriate values should be used in the analysis, which should also address the seasonal variability in background visibility. The National Park Service is very concerned about protecting the best visibility days from degradation because those days are the most sensitive to impairment (i.e., visibility is more rapidly and perceptibly affected if the atmosphere is initially "clean"). This policy is supported by the national visibility goal of preventing any future and remedying any existing visibility impairment. Therefore, the federal land manager has been recommending that permit applicants use the top 10% background visual range values. The

The National Park Service now has site-specific data for many class I areas which, in some cases, (e.g., Colorado Plateau, Great Basin) indicate greater background visual range values than those cited in the 1988 workbook.

National Park Service is working with the Environmental Protection Agency to document this approach in a revised VISCREEN manual.

If the permit applicant fails the VISCREEN visibility analyses, the applicant should then perform a more sophisticated visibility analysis using the EPA PLUVUE II model. The National Park Service is available to discuss the use of the VISCREEN and PLUVUE II models.

The National Park Service also recommends that applicants consider visibility impacts on scenic views from class I areas as part of the visibility analysis. Applicants should be aware of state requirements for analysis of impacts on integral vistas which, at a minimum, includes vistas that have been appropriately identified by the federal land manager. These analyses should be in accordance with the regulations published in the December 2, 1980, *Federal Register*. Pictorial presentation of the results using photographs, computer simulations, or artist's conceptions would be beneficial.

> 'n addition to potential plume impacts, potential exists for proposed sources to contribute to existing regional haze levels.

Regional haze is a problem that impairs visibility in many class I parks and refuges. Preliminary work on methods for assessing single-source impacts on regional haze has been conducted, and the federal land manager is willing to provide guidance to permit applicants on conducting acceptable haze impact analyses.

In summary, a complete permit application should include a thorough AQRV analysis, including analysis of the impacts on visibility, soils, water, odor, flora, and fauna, that would occur as a result of the source or modification, in conjunction with all other emission sources affecting an area. Also, an air quality impact analysis is required to predict the effects of general commercial, residential, industrial, and other growth associated with the source or modification.

> To assist the applicant in performing these additional impact analyses, the National Park Service will provide the applicant, within 60 days of the applicant's request, a list of sensitive resources in the potentially impacted class I area. The applicant should submit the request to the National Park Service, Air Quality Division.

Ambient Air Quality and Air Quality-related Values Monitoring Requirements

A complete permit application must also contain representative ambient air monitoring data. In general, at least one year of data is required. For projects located in the proximity of NPS or FWS class I areas, the National Park Service, Air Quality Division, should be contacted to facilitate installing monitoring equipment in the class I areas. The Air Quality Division initiates most air monitoring studies in the national parks, with the cooperation of the appropriate NPS regional office and park superintendent. The division will also coordinate monitoring efforts with the appropriate FWS authorities, if applicable. The National Park Service currently conducts monitoring in each of its 48 class I parks, and these data may be appropriate for using in permit applications. A summary of the NPS air quality monitoring activities is included in Appendix F. The NPS-collected data are in the EPA Aerometric Information Retrieval System (AIRS) and can be readily retrieved from this system. Contacting the Air Quality Division can help avoid duplication of effort with respect to ambient air quality monitoring.

In addition to preconstruction ambient monitoring, in certain instances, permit applicants may have to conduct pre- or postconstruction visibility or biological effects monitoring or studies. Permit applicants should consult with the federal land manager regarding the need for additional AQRV monitoring or studies.

Adverse Impact Considerations

The legislative history of the Clean Air Act provides direction to the federal land manager on how to comply with the affirmative responsibility to protect air quality-related values in class I areas:

> The Federal land manager holds a powerful tool. He is required to protect Federal lands from deterioration of an established value, even when class I numbers are not exceeded. . . . While the general scope of the Federal Government's activities in preventing significant deterioration has been carefully limited, the Federal land manager should assume an aggressive role in protecting the air quality values of land areas under this jurisdiction. . . . In cases of doubt the land manager should err on the side of protecting the air quality-related values for future generations (Senate Report No. 95-127, 95th Congress, 1st Session, 1977).

The assistant secretary for Fish and Wildlife and Parks, as federal land manager for NPS- and FWS-managed class I areas , has stated that air pollution effects on resources in class I areas constitute an unacceptable adverse impact if such effects

1. diminish the national significance of the area
2. impair the quality of the visitor experience
3. impair the structure and functioning of ecosystems

Also, the federal visibility protection regulations (40 CFR 51.300, *et seq.*, 52.27) define adverse impact on visibility as

> visibility impairment which interferes with the management, protection, preservation or enjoyment of the visitor's visual experience of the Federal class I area. This determination must be made on a case-by-case basis taking into account the geographic extent, intensity, duration, frequency and time of visibility impairment, and how these factors correlate with: (1) times of visitor use of the Federal class I area, and (2) the frequency and timing of natural conditions that reduce visibility.
> . . . (Id. 51.301(a))

The internal procedures used by the federal land manager for determining adverse impact under section 165(d)(2)(C)(ii) and (iii) of the Clean Air Act are presented in Appendix G; see also 47 FR 30223, July 12, 1982. The procedures have been modified in some cases. Such modifications have been necessary because the federal land manager often does not have sufficient time after being notified that a permit application is complete to publish a *Federal Register* notice, solicit and consider comments, and make a final adverse impact determination. Permitting authorities typically provide the federal land manager 60 days or less to submit comments on a complete application. Although decisions on particular permits are always made on a case-by-case basis, public comments may be solicited in advance on a range of issues or recommendations (e.g., 55 FR 38403, September 18, 1990, and 57 FR 4465, February 5, 1992).

> Factors that are considered in determining whether an effect is unacceptable, and therefore adverse, include the projected frequency, magnitude, duration, location, and reversibility of the impact.

Literature Cited

Environmental Protection Agency. 1986. Guideline on air quality models. Revised. EPA-450/2-78-027R.

Environmental Protection Agency. 1988. Workbook for plume visual impact screening and analysis. EPA-450/4-88-015.

Environmental Protection Agency. 1990. New source review workshop manual. Draft.

U.S. Department of the Interior, National Park Service. 1992. Technical support document regarding adverse impact determination for Great Smoky Mountains National Park. Unpublished report.

Appendix A.
NPS Class I Areas

Appendix B.
FWS Class I Areas

Appendix C.
Class II Areas Possessing Air Quality-related Values as Important Attributes

Area Name	State or Territory
Glacier Bay National Park and Preserve	AK
Katmai National Park & Preserve	AK
Canyon de Chelly National Monument	AZ
*Chiricahua National Monument	AZ
Organ Pipe Cactus National Monument	AZ
*Saguaro National Monument	AZ
Sunset Crater National Monument	AZ
Wupatki National Monument	AZ
Channel Islands National Park	CA
Death Valley National Monument	CA, NV
*Joshua Tree National Monument	CA
*Lava Beds National Monument	CA
Muir Woods National Monument	CA
*Pinnacles National Monument	CA
*Black Canyon of the Gunnison National Monument	CA
Colorado National Monument	CO
Dinosaur National Monument	CO, UT
*Great Sand Dunes National Monument	CO
Big Cypress National Preserve	FL
Biscayne National Park	FL
Fort Jefferson National Monument	FL
*Craters of the Moon National Monument	ID
*Bandelier National Monument	NM
Capulin Volcano National Monument	NM
El Morro National Monument	NM
Gila Cliff Dwellings National Monument	NM
White Sands National Monument	NM
John Day Fossil Beds National Monument	OR
*Badlands National Park	SD
Cedar Breaks National Monument	UT
Natural Bridges National Monument	UT
Buck Island Reef National Monument	VI
Devil's Tower National Monument	WY
Fossil Butte National Monument	WY

*Federal wilderness areas already designated class I.

Appendix D.
NPS Permit Notification List

In all cases notify:

Chief, Policy, Planning and Permit Review Branch
National Park Service
Air Quality Division
P.O. Box 25287
Denver, CO 80225-0287

Notify regional director at:

Region	State
Alaska Regional Office National Park Service 2525 Gambell Street Anchorage, AK 99503	Alaska
Mid-Atlantic Regional Office National Park Service 143 South Third Street Philadelphia, PA 19106	Pennsylvania, Maryland, West Virginia, Delaware, Virginia, excluding parks assigned to National Capital Region
Midwest Regional Office National Park Service 1709 Jackson Street Omaha, NE 68102	Ohio, Indiana, Michigan, Wisconsin, Illinois, Minnesota, Iowa, Missouri, Nebraska, Kansas
National Capital Regional Office National Park Service 1100 Ohio Drive, S.W. Washington, D.C. 20242	District of Columbia, some units in Maryland, Virginia, West Virginia

Region	State
North Atlantic Regional Office National Park Service 15 State Street Boston, MA 02109	Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New York, New Jersey
Pacific Northwest Regional Office National Park Service 83 South King Street, Suite 212 Seattle, WA 98104	Idaho, Oregon, Washington
Rocky Mountain Regional Office National Park Service P.O. Box 25287 Denver, CO 80225-0287	Montana, North Dakota, South Dakota, Wyoming, Utah, Colorado
Southeast Regional Office National Park Service 75 Spring Street, S.W. Atlanta, GA 30303	Kentucky, Tennessee, North Carolina, South Carolina, Mississippi, Alabama, Georgia, Florida, Puerto Rico, Virgin Islands
Southwest Regional Office National Park Service P.O. Box 728 Santa Fe, NM 87504	Arkansas, Louisiana, Texas, Oklahoma, New Mexico, northeast corner of Arizona
Western Regional Office National Park Service 600 Harrison Street, Suite 600 San Francisco, CA 94107-1372	California, Nevada, most of Arizona, Hawaii

Notify NPS class I area superintendent at:

Parks

Acadia National Park
P.O. Box 177
Bar Harbor, ME 04609

Arches National Park
P.O. Box 907
Moab, UT 84532

Badlands National Park
P.O. Box 6
Interior, SD 57750

Bandelier National Monument
HCR 1, Box 1, Suite 15
Los Alamos, NM 87544

Big Bend National Park
Big Bend National Park, TX 79834

Black Canyon of the Gunnison National Monument
P.O. Box 1648
Montrose, CO 81402

Bryce Canyon National Park
Bryce Canyon, UT 84717

Canyonlands National Park
125 West 200 South
Moab, UT 84532

Capitol Reef National Park
Torry, UT 84775

Carlsbad Caverns National Park
3225 National Parks Highway
Carlsbad, NM 88220

Chiricahua National Monument
Dos Cabezas Route, Box 6500
Willcox, AZ 85643

Crater Lake National Park
P.O. Box 7
Crater Lake, OR 97604

Craters of the Moon National Monument
P.O. Box 29
Arco, ID 83213

Denali National Park and Preserve
P.O. Box 9
McKinley Park, AK 99755

Everglades National Park
P.O. Box 279
Homestead, FL 33030

Glacier National Park
West Glacier, MT 59936

Grand Canyon National Park
P.O. Box 129
Grand Canyon, AZ 86023

Grand Teton National Park
P.O. Box 170
Moose, WY 83012

Great Sand Dunes National Monument
11500 Highway 150
Mosca, CO 81146

Great Smoky Mountains National Park
Gatlinburg, TN 37738

Guadalupe Mountains National Park
HC 60, Box 400
Salt Flat, TX 79847-9400

Haleakala National Park
P.O. Box 369
Makawao, HI 96768

Parks

Hawaii Volcanoes National Park, HI 96718

Isle Royale National Park
87 North Ripley Street
Houghton, MI 49931

Joshua Tree National Monument
74485 National Monument Drive
Twentynine Palms, CA 92277

Kings Canyon National Park
c/o Sequoia and Kings Canyon National Parks
Three Rivers, CA 93271

Lassen Volcanic National Park
P.O. Box 100
Mineral, CA 96063-0100

Lava Beds National Monument
P.O. Box 867
Tulelake, CA 96134

Mammoth Cave National Park
Mammoth Cave, KY 42259

Mesa Verde National Park
Mesa Verde National Park, CO 81330

Mount Rainier National Park
Tahoma Woods, Star Route
Ashford, WA 98304-9801

North Cascades National Park
2105 Highway 20
Sedro Woolley, WA 98284

Olympic National Park
600 East Park Avenue
Port Angeles, WA 98362

Petrified Forest National Park
Petrified Forest National Park, AZ 86028

Pinnacles National Monument
Paicines, CA 95043

Point Reyes National Seashore
Point Reyes, CA 94956

Redwood National Park
1111 Second Street
Crescent City, CA 95531

Rocky Mountain National Park
Estes Park, CO 80517

Saguaro National Monument
3693 South Old Spanish Trail
Tucson, AZ 85730-5699

Sequoia National Park
c/o Sequoia and Kings Canyon National Parks
Three Rivers, CA 93271

Shenandoah National Park
Route 4, Box 348
Luray, VA 22835

Theodore Roosevelt National Park
P.O. Box 7
Medora, ND 58645

Virgin Island National Park
#10 Estate Nazareth
St. Thomas, VI 00802

Voyageurs National Park
P.O. Box 50
International Falls, MN 56649

Wind Cave National Park
Hot Springs, SD 57747

Yellowstone National Park
P.O. Box 168
Yellowstone National Park, WY 82190

Yosemite National Park
P.O. Box 577
Yosemite National Park, CA 95389

Zion National Park
Springdale, UT 84767

Appendix E.
FWS Permit Notification List

In all cases notify:

Chief, Air Quality Branch
U.S. Fish and Wildlife Service
c/o National Park Service
Air Quality Division
P.O. Box 25287
Denver, CO 80225-0287

Notify regional director at:

Region	States
Fish and Wildlife Service Region 1 911 NE 11th Avenue Eastside Federal Complex Portland, OR 97232	Washington, Oregon, Idaho, Nevada, Hawaii, California
Fish and Wildlife Service Region 2 P.O. Box 1306 Albuquerque, NM 87103	Arizona, New Mexico, Oklahoma, Texas
Fish and Wildlife Service Region 3 Federal Building, Fort Snelling Twin Cities, MN 55111	Minnesota, Wisconsin, Illinois, Indiana, Ohio, Iowa, Missouri, Michigan
Fish and Wildlife Service Region 4 75 Spring Street, S.W. Atlanta, GA 30303	Arkansas, Louisiana, Mississippi, Alabama, Georgia, Florida, North Carolina, South Carolina, Tennessee, Kentucky, Puerto Rico

Region	States
Fish and Wildlife Service Region 5 One Gateway Center, Suite 700 Newton Corner, MA 02158	Virginia, West Virginia, Maryland, Delaware, Pennsylvania, New Jersey, New York, Vermont, New Hampshire, Massachusetts, Connecticut, Rhode Island, Maine
Fish and Wildlife Service Region 6 P.O. Box 25486 Denver Federal Center Denver, CO 80225	Montana, Wyoming, North Dakota, South Dakota, Nebraska, Utah, Colorado, Kansas
Fish and Wildlife Service Region 7 1011 E. Tudor Road Anchorage, AK 99503	Alaska

Notify FWS class I area refuge manager at:

Refuge Areas

Bering Sea
Alaska Maritime National
Wildlife Refuge
202 West Pioneer Avenue
Homer, AK 99603

Breton
Bogue Chitto National
Wildlife Refuge
1010 Gause Blvd., Bldg. 936
Slidell, LA 70458

Brigantine
Edwin B. Forsythe National
Wildlife Refuge
Great Creek Road, Box 72
Oceanville, NJ 08231

Bosque del Apache
Bosque del Apache National
Wildlife Refuge
Box 1246
Socorro, NM 87801

Cape Romain
Cape Romain National
Wildlife Refuge
390 Bulls Island Road
Awendaw, SC 29429

Chassahowitzka
Chassahowitzka National
Wildlife Refuge
7798 S. Suncoast Blvd.
Route 2, Box 44
Homosassa, FL 32646

Lostwood
Lostwood National
Wildlife Refuge
Rural Route 2, Box 98
Kenmare, ND 58746

Medicine Lake
Medicine Lake National
Wildlife Refuge
HC 51, Box 2
Medicine Lake, MT 59247

Mingo
Mingo National
Wildlife Refuge
Rural Route 1, Box 103
Puxico, MO 63960

Moosehorn (Edmunds and
Baring Units)
Moosehorn National
Wildlife Refuge
Box 10077
Calais, ME 04619

Okefenokee
Okefenokee National
Wildlife Refuge
Route 2, Box 338
Folkston, GA 31537

Red Rock Lakes
Red Rock Lakes National
Wildlife Refuge
Monida Star Route
Box 15
Lima, MT 59739

Salt Creek
Bitter Lake National
Wildlife Refuge
Box 7
Roswell, NM 88202-0007

Seney
Seney National
Wildlife Refuge
Seney, MI 49883

Simeonof
Alaska Maritime National
Wildlife Refuge
202 West Pioneer Avenue
Homer, AK 99603

St. Marks
St. Marks National
Wildlife Refuge
Box 68
St. Marks, FL 32355

Swanquarter
Mattamuskeet National
Wildlife Refuge
Route 1, Box N-2
Swanquarter, NC 27885

Tuxedni
Alaska Maritime National
Wildlife Refuge
202 W. Pioneer Avenue
Homer, AK 99603

UL Bend
Charles M. Russell National
Wildlife Refuge
Box 110
Lewistown, MT 59457

Wichita Mountains
Wichita Mountains National
Wildlife Refuge
Route 1, Box 448
Indiahoma, OK 73552

Wolf Island
Georgia Coastal Complex
Box 8487
Savannah, GA 31412

Appendix F.
NPS Air Quality Monitoring Activities

inter-office communicatior

to: New Source Review Contacts date: 31 January 1989

from: Bob Hodanbosi, Manager-AQM&P Division of Air Pollution Control

subject: New Source Modeling

This memorandum supersedes the April 9, 1981 Division of Air Pollution Control policy on the requirements for new source modeling. Due to recent changes in the ambient air quality standards (PM_{10}), Prevention of Significant Deterioration (PSD) increments (nitrogen oxides), and U.S. EPA guideline models, an update of the previous guidance is necessary.

Any proposed new source or modification resulting in the increase of potential emissions greater than the following significant rates shall undergo an air quality modeling analysis prior to receiving a permit to install (PTI). As applied here, "potential emissions" refers to controlled emissions including any operating rate restrictions which are included as terms and conditions of the PTI.

The significant emission rates are:

Carbon monoxide (CO)	100 tons per year
Nitrogen oxides (NO_x)	25 tons per year
Sulfur dioxide (SO_2)	25 tons per year
Particulate matter (TSP)	15 tons per year
Particulate matter less than 10 microns (PM_{10})	10 tons per year
Volatile organic compounds (VOC)	40 tons per year
Lead (Pb)	0.6 tons per year
Asbestos	0.007 tons per year
Beryllium (Be)	0.0004 tons per year
Mercury	0.1 tons per year
Vinyl chloride	1.0 tons per year
Fluoride	3 tons per year
H_2SO_4 acid mist	7 tons per year
Hydrogen sulfide	10 tons per year
Total reduced sulfur	10 tons per year
Reduced sulfur compounds	10 tons per year
TLV air toxics	1.0 tons per year

GEN 1001 (3/84)

With the exception of NO_x, SO_2, TSP, PM_{10} and TLV air toxics, these values are equal to the new federal PSD definitions of significant emission rates. A New Source Review Codeing Form should be completed for any proposed source which has emissions equal to or greater than these values. Upon request, we can also model other sources which you believe may have a significant air quality impact.

U.S. EPA has also revised the models that are to be used in new source modeling. There is a greater emphasis on the effects of terrain and structure on plume dispersion. The models allow for the consideration of building downwash, lake breeze fumigation, and terrain elevation. The New Source Coding Form will need to be completed with building dimensions in order to utilize the increased modeling capabilities. Obtaining these data will no longer be optional. The revised form is attached for your use.

If you have any questions, please contact me at (614) 644-2270.

BH:jlc

Attachment

cc: Tom Tucker
Kathleen Shannon

NEW SOURCE REVIEW CODING FORM

FACILITY NAME _____ SOURCE NO. _____

CITY _____ COUNTY _____ PTI NO. 1 - 5

	MAXIMUM RATE	AVERAGE RATE
POLLUTANT _____		
ALLOWABLE EMISSION (G/SEC, LB/HR)	10 . 17	10 . 17
POLLUTANT _____		
ALLOWABLE EMISSION (G/SEC, LB/HR)	10 . 17	10 . 17
STACK HEIGHT (M, FT)	18 . 23	
STACK TEMPERATURE (°K°F)	24 . 29	24 . 29
STACK VELOCITY (M/SEC, FT/MIN)	36 . 41	36 . 41
STACK DIAMETER (M, FT)	42 . 47	
VOLUME FLOW (M^3/SEC, FT^3/MIN)	48 . 55	48 . 55

U.T.M. COORDINATES: EASTING _____ KM NORTHING _____ KM

OPERATING SCHEDULE: _____ HOURS/DAY _____ DAYS/WEEK _____ WEEKS/YEAR

REVIEWING ENGINEER: _____ DATE: _____

AGENCY: _____

I. THE SOURCE IS LOCATED IN (CHECK ONE): _____ URBAN AREA _____ RURAL AREA

II. DESCRIBE ANY SIGNIFICANT TERRAIN FEATURES (HILLS, VALLEYS, LAKES, ETC.) WITHIN A FEW MILES OF THE SOURCE. (IF POSSIBLE, INCLUDE A COPY OF THE PORTION OF A U.S.G.S. MAP WHICH INCLUDES THE PLANT LOCATION.)

III. COMPLETE THE FOLLOWING [NEEDED FOR BUILDING DOWNWASH CALCULATIONS].

A. DIMENSIONS OF BUILDING TO WHICH STACK IS ATTACHED:

LENGTH _____ WIDTH _____ HEIGHT _____

A. DIMENSIONS OF NEARBY STRUCTURES (IF SIGNIFICANT):

LENGTH _____ WIDTH _____ HEIGHT _____

IV. DESCRIBE ANY ADDITIONAL SITING OR DESIGN CONSIDERATIONS.

April 9, 1981

TO: New Source Review Contacts

FROM: Bob Hodanbosi, Chief, DAQMP

SUBJECT: New Source Review Modeling

In response to the recent revisions of the PSD and Emission Offset Regulations it has become necessary to modify the Ohio EPA requirements regarding the modeling analysis of proposed new sources.

Any proposed new source or modification resulting in the increase of potential emissions greater than the following significant rates shall undergo an air quality modeling analysis prior to receiving a permit to install. As applied here, "potential emissions" refers to controlled emissions including any operating rate restrictions which are included as terms and conditions of the Permit to Install.

The significant emission rates are:

Carbon Monoxide	100	Tons per year
Oxides of Nitrogen	25	Tons per year
Sulfur Dioxide	25	Tons per year
Particulate Matter	10	Tons per year
Volatile Organic Compounds	40	Tons per year
Lead	0.6	Tons per year
Asbestos	0.007	Tons per year
Beryllium	0.0004	Tons per year
Mercury	0.1	Tons per year
Vinyl Chloride	1.0	Tons per year
Fluoride	3	Tons per year
H_2SO_4 Acid Mist	7	Tons per year
Hydrogen Sulfide	10	Tons per year
Total reduced sulfur	10	Tons per year
Reduced sulfur compounds	10	Tons per year

With the exception of NO_x, SO_2 and PM, these values are equal to the new federal PSD definition of significant emissions rates. A New Source Review Modeling form should be completed for any proposed sources which have emissions equal to or greater than these values. Upon request, we can also model other sources which you feel are significant. If you have any questions about this revision please call me at (614) 466-6116.

BH/gm

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State of Ohio Environmental Protection Agency
Box 1049, 361 E. Broad St., Columbus, Ohio 43216 • (614) 466-8565

James A. Rhodes, Governor
James F. McAvoy, Director

APPROXIMATE DISTANCE FROM VARIOUS
OHIO CITIES TO MANDATORY CLASS I PSD AREAS*

	Mammouth Cave	Dolly Sods/ Otter Creek	Great Smokey Mountains	Seney
Akron	350	160	340	400
Canton	350	150	340	440
Cincinnati	150	270	230	480
Cleveland	380	200	370	390
Columbus	240	200	270	460
Dayton	200	250	270	440
Portsmouth	190	200	190	530
Steubenville	360	100	320	480
Toledo	330	270	390	333
Youngstown	390	150	360	450

*All units in miles

Rose Mary, Alan, Sidnia, Laura FYI

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

Round
MA

MAY 1 8 2001

REPLY TO THE ATTENTION OF:
(AE-17J)

Jim Orlemann, Manager
Engineering Section
Division of Air Pollution Control
Ohio Environmental Protection Agency
P.O. Box 1049
Columbus, Ohio 43215

Dear Jim:

Enclosed you will find the final version of the "Issuance of the Clean Air Act Stationary Source Compliance Monitoring Strategy (CMS)". This guidance underwent revision subsequent to the 1998 United States Environmental Protection Agency (U.S. EPA) Inspector General report on this issue.

This policy is immediately effective and will be a part of U.S. EPA's discussions with States during the various FY 2002/2003 grant/enforcement agreement/Memorandum of Understanding negotiations. In an effort to address questions and implementation issues, Region 5 will be hosting a one-day CMS training session on Friday, June 15, 2001, from 9:00 am until 4:00 am at our offices in Chicago. Those interested in attending this training, should notify Lisa Holscher, of my staff, by Thursday, May 31. Ms. Holscher can be reached by telephone at (312) 886-6818 or by email at holscher.lisa@epa.gov.

Please review this document and share it with your staff. If you should have any questions with regard to its implementation, please contact Lisa Holscher at the number provided above.

Sincerely yours,

George T. Czerniak, Chief
Air Enforcement and Compliance Assurance Branch

Enclosure

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

RECEIVED
APR 30 2001
AIR ENFORCEMENT BRANCH,
U.S. EPA, REGION 5

APR 25 2001

OFFICE OF
ENFORCEMENT AND
COMPLIANCE ASSURANCE

MEMORANDUM

SUBJECT: Issuance of the Clean Air Act Stationary Source Compliance Monitoring Strategy

FROM: Michael Stahl, Director
Office of Compliance

TO: See Addressees

Attached you will find the revised Clean Air Act Stationary Source Compliance Monitoring Strategy (CMS). This policy was developed by the Office of Compliance, working closely with the Office of Regulatory Enforcement, the Office of General Council, the Regions, and STAPPA/ALAPCO.

This revised policy replaces the 1991 CMS and we will begin implementing it immediately. Therefore, it is important that each Region discuss the policy and negotiate with the States/locals their FY 2002 air compliance monitoring programs consistent with the revised CMS. Our goal in updating the policy has been to take into account the changes that have occurred in the air program since CMS was last revised, while continuing to provide States/locals with flexibility in implementing compliance monitoring programs. This revised CMS also addresses the major concerns raised in the 1998 EPA Inspector General report on this issue. The major changes to CMS are as follows:

(1) Emphasis has been placed on Title V major sources and a limited subset of synthetic minor sources.

(2) Minimum frequencies have been recommended for determining the compliance status of facilities covered by this policy. Alternatives may be developed and negotiated with the Regions to enable States/locals to address important local compliance issues.

(3) The policy explicitly recognizes that a variety of tools ranging from self-certifications to traditional stack tests are available and should be used to evaluate compliance. It further recognizes that on-site visits may not be necessary to evaluate the compliance status of a facility given the wide range of self-reported information such as annual Title

V compliance certifications, deviation reports, and semi-annual monitoring reports based on periodic monitoring and compliance assurance monitoring. However, to ensure a compliance presence in the field, a minimum frequency for on-site visits has been recommended.

(4) Three categories of compliance monitoring replace the current levels of inspection. The new compliance monitoring categories are: Full Compliance Evaluations, Partial Compliance Evaluations, and Investigations.

(5) CMS plans are no longer required to be submitted every year, but may be submitted once every two years.

To facilitate implementation of the revised CMS in FY 2002, changes are currently being made to the Aerometric Information Retrieval System/AIRS Facility Subsystem (AIRS/AFS) and are being incorporated in the Information Collection Request, "Source Compliance and State Action Reporting," OMB Number 2060-0391. Specifically, changes are being made to the system to provide for additional collection activities associated with identifying facilities; conducting compliance evaluations; and inputting information on Title V compliance certifications and stack tests. Changes to the system are scheduled to be completed by the end of this fiscal year.

I appreciate the support your offices provided during the development of this policy and look forward to your continued support as we implement CMS. In the upcoming weeks, we plan to provide training to the Regions/States/locals on the overall policy, as well as the resulting changes to AIRS/AFS. We will be working with your offices to develop the training schedule. In the meantime, if you have any questions or comments, please contact Mamie Miller at (202) 564-7011.

Attachment

Addressees:

Director, Office of Ecosystem Protection, Region 1
Director, Division of Enforcement and Compliance Assistance, Region II
Director, Air Protection Division, Region III
Director, Air, Pesticides, and Toxics Management Division, Region IV
Director, Office of Enforcement and Compliance Assurance, Region V
Director, Compliance Assurance and Enforcement Division, Region VI
Director, Air, RCRA, and Toxics Division, Region VII
Assistant Regional Administrator, Office of Enforcement, Compliance, and Environmental Justice Region VIII
Director, Air Division, Region IX
Director, Office of Air, Region X

cc: Eric Schaeffer, Office of Regulatory Enforcement
Michael Alushin, Office of Compliance
Ken Gigliello, Office of Compliance
Fred Stiehl, Office of Compliance
Bruce Buckheit, Office of Regulatory Enforcement
Rich Biondi, Office of Regulatory Enforcement
Mario Jorquera, Office of Regulatory Enforcement
Mamie Miller, Office of Compliance
Rob Lischinsky, Office of Compliance
Mark Antell, Office of Compliance
Debbie Thomas, Office of Compliance
Jim Nelson, Office of General Counsel
Barbara Pace, Office of General Counsel
Greg Snyder, Federal Facilities Enforcement Office
Steve Hitte, Office of Air Quality Planning and Standards
Fred Weeks, Region I
Arnie Leriche, Region I
Ken Eng, Region II
Karl Mangels, Region II
Bernie Turlinski, Region III
Beverly Spagg, Region IV
George Czerniak, Region V
John Hepola, Region VI
Betsy Metcalf, Region VI
Don Toensing, Region VII
Ron Rutherford, Region VII
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CLEAN AIR ACT
STATIONARY SOURCE COMPLIANCE MONITORING STRATEGY
April 2001

DISCLAIMER

The discussion in this document is intended solely as guidance. This document is not a regulation. It does not impose legally binding requirements on EPA, States, or the regulated community. This policy does not confer legal rights or impose legal obligations upon any member of the public. The general description provided here may not apply to a particular situation based on the circumstances. Interested parties are free to raise questions and objections about the substance of this policy and the appropriateness of the application of this policy to a particular situation. EPA retains the discretion to adopt approaches on a case-by-case basis that differ from those described in this policy where appropriate. This document may be revised periodically without public notice. EPA welcomes public input on this document at any time.

Any questions concerning this policy may be directed to either Mamie Miller or Rob Lischinsky at 202-564-2300.

CLEAN AIR ACT STATIONARY SOURCE COMPLIANCE MONITORING STRATEGY
April 2001

I INTRODUCTION

- The Clean Air Act Stationary Source Compliance Monitoring Strategy (CMS) was last revised in 1991. In the intervening years, the national policy was not consistently implemented across the country by the EPA Regions and their State/local agencies. Two major factors contributed to this situation: (1) The policy became dated as new Clean Air Act (CAA) programs were implemented, and the Environmental Protection Agency (EPA) planning process changed. (2) EPA Headquarters ceased to provide oversight of the policy on a national level when the Agency's enforcement program was reorganized, thus giving the impression that it was no longer necessary to implement the policy.

- A review by the EPA Office of the Inspector General ("Consolidated Report on OECA's Oversight of Regional and State Air Enforcement Programs," E1G-AE7-03-0045-8100244, September 25, 1998) identified this abandonment as a fundamental problem that adversely affected the effectiveness of the air enforcement program.

- In response to the Office of Inspector General report, the Office of Enforcement and Compliance Assurance (OECA) made a commitment to evaluate how the policy was being implemented, and to revise it as necessary. The Office of Compliance was given the responsibility for satisfying this commitment.

- Between October 1998 and May 1999, interviews were conducted with all of the EPA Regions and twenty-two States. The purpose of these interviews was to collect baseline information on implementation of the policy; obtain feedback on its strengths and weaknesses; and identify any appropriate alternatives. A report entitled "A Review of the Compliance Monitoring Strategy" summarized the findings of these interviews, and was issued on July 26, 1999.

- A Workgroup with representatives from OECA Headquarters, the Regions and several States was formed to review these findings and develop a revised policy.

- The following policy is based on the recommendations of this Workgroup; comments received during the comment period on the draft proposals; and in-depth discussions with representatives of the State and Territorial Air Pollution Program Administrators and the Association of Local Air Pollution Control Officials (STAPPA/ALAPCO).

- The major differences between this policy and the 1991 version are as follows:

(1) Emphasis has been placed on Title V major sources and a limited subset of synthetic minor sources.

(2) Minimum frequencies have been recommended for determining the compliance status of facilities covered by this policy. Alternatives may be developed and negotiated with the Regions to enable States/locals to address important local compliance issues.

(3) The policy explicitly recognizes that a variety of tools ranging from self-certifications to traditional stack tests are available and should be used to evaluate compliance. It further recognizes that on-site visits may not be necessary to evaluate the compliance status of a facility given the wide range of self-reported information such as annual Title V compliance certifications, deviation reports, and semi-annual monitoring reports based on periodic monitoring and compliance assurance monitoring. However, to ensure a compliance presence in the field, a minimum frequency for on-site visits has been recommended.

(4) Three categories of compliance monitoring replace the current levels of inspection defined in the 1987 Clean Air Act Compliance/Enforcement Guidance Manual. The new compliance monitoring categories are: Full Compliance Evaluations, Partial Compliance Evaluations and Investigations.

(5) CMS plans are no longer required to be submitted every year, but may be submitted once every two years.

II GOALS OF THE COMPLIANCE MONITORING STRATEGY

1. Provide national consistency in developing stationary source air compliance monitoring programs, while at the same time provide States/locals with flexibility to address local air pollution and compliance concerns.

2. Improve communication between States/locals and Regions on stationary source air compliance monitoring programs, and enhance EPA oversight of these programs.

3. Provide a framework for developing stationary source air compliance monitoring programs that focuses on achieving measurable environmental results.

4. Provide a mechanism for recognizing and utilizing the wide range of tools available for evaluating and determining compliance.

III OVERALL PROCESS

1. States/locals submit a CMS plan biennially for discussion with and approval by the Regions. Regions also prepare a plan biennially for discussion with their States/locals.

2. The plans are summarized, and incorporated into the annual Regional response to the OECA Memorandum of Agreement (MOA).

3. States/locals and Regions maintain records of their compliance monitoring activities, and enter facility-specific compliance data in the national air compliance data base (AIRS/AFS, or its successor).

4. States/locals and Regions review the results of the compliance monitoring activities annually, and prepare an annual update to the biennial plan as necessary. Major redirections are discussed as they arise.

5. Regions conduct in-depth evaluations of the overall State/local compliance monitoring program periodically. Headquarters conducts similar evaluations of the Regional programs as well.

IV SCOPE OF POLICY

- EPA recognizes that State/local agencies perform additional compliance monitoring activities beyond those addressed by this policy. This policy is not designed to preclude those activities, but focuses on federally enforceable requirements for the following source categories: (1) Title V major sources; and (2) synthetic minor sources that emit or have the potential to emit at or above 80 per cent of the Title V major source threshold. For purposes of this policy, potential to emit means the maximum capacity of a stationary source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation, shall be treated as part of its design if the limitation or the effect it would have on emissions is federally enforceable or legally and practicably enforceable by a state or local air pollution

control agency.

The 80 per cent threshold was selected to ensure that those facilities that either have the potential to emit or actually emit pollutants close to the major source threshold are evaluated periodically. This enables States/locals to focus resources on those facilities that are most environmentally significant. In determining whether a synthetic minor source falls within the scope of this policy, all facilities with the potential to emit at or above the 80 per cent threshold are included regardless of whether their actual emissions are lower.

V COMPLIANCE MONITORING CATEGORIES

- States/locals and Regions are encouraged to use a variety of techniques to determine compliance, and utilize the full range of self-monitoring information stemming from the 1990 CAA Amendments.

- Consistent with this approach, there are three categories of compliance monitoring: Full Compliance Evaluations, Partial Compliance Evaluations, and Investigations. Each of these categories is defined below:

1. Full Compliance Evaluations

A Full Compliance Evaluation is a comprehensive evaluation of the compliance status of a facility. (For the purposes of this policy, "facility" is used in the broadest sense of the term incorporating all regulated emission units within the facility.) It addresses all regulated pollutants at all regulated emission units. Furthermore, it addresses the current compliance status of each emission unit, as well as the facility's continuing ability to maintain compliance at each emission unit.

A Full Compliance Evaluation should include the following:

- A review of all required reports, and to the extent necessary, the underlying records. This includes all monitored data reported to the regulatory agency (e.g., CEM and continuous parameter monitoring reports, malfunction reports, excess emission reports). It also includes a review of Title V self-certifications, semi-annual monitoring and periodic monitoring reports, and any other reports required by permit.

- An assessment of control device and process operating conditions as appropriate. An on-site visit to make this assessment may not be necessary based upon factors such as the availability of continuous emission and periodic monitoring data, compliance certifications, and deviation reports. Examples of source categories that may not require an on-site visit to assess compliance include, but are not limited to, gas-fired compressor stations, boilers in large office and apartment buildings, peaking stations, and gas turbines.
- A visible emission observation as needed.
- A review of facility records and operating logs.
- An assessment of process parameters such as feed rates, raw material compositions, and process rates.
- An assessment of control equipment performance parameters (e.g., water flow rates, pressure drop, temperature, and electrostatic precipitator power levels).
- A stack test where there is no other means for determining compliance with the emission limits. In determining whether a stack test is necessary, States/locals should consider factors such as: size of emission unit; time elapsed since last stack test; results of that test and margin of compliance; condition of control equipment; and availability and results of associated monitoring data.

In addition to conducting a stack test when there is no other means of determining compliance, States/locals should conduct a stack test whenever they deem appropriate.

A Full Compliance Evaluation should be completed within the fiscal year in which the commitment is made, except in the case of extremely large, complex facilities (hereafter referred to as mega-sites). Regulatory agencies may take up to three years to complete a Full Compliance Evaluation at a mega-site, provided the agency is conducting frequent on-site visits or Partial Compliance Evaluations throughout the entire evaluation period.

A Full Compliance Evaluation may be done piecemeal through a series of Partial Compliance Evaluations.

2. Partial Compliance Evaluations

A Partial Compliance Evaluation is a documented compliance assessment focusing on a subset of regulated pollutants, regulatory requirements, or emission units at a given facility. A Partial Compliance Evaluation should be more comprehensive than a cursory review of individual reports. It may be conducted solely for the purpose of evaluating a specific aspect of a facility, or combined over the course of a year (or up to three years at mega-sites) to satisfy the requirements of a Full Compliance Evaluation.

This type of evaluation could be used for example to effectively assess compliance with the HON MACT requirements if that is the primary area of concern at a chemical manufacturing facility. If at some point later in the year, the regulatory agency decided a Full Compliance Evaluation was necessary, the agency could combine the results of the MACT evaluation with subsequent evaluations focusing on the balance of other CAA requirements.

3. Investigations

An Investigation can be distinguished from the other two categories in that generally it is limited to a portion of a facility, is more resource intensive, and involves a more in-depth assessment of a particular issue. It usually is based on information discovered during a Full Compliance Evaluation, or as the result of a targeted industry, regulatory or statutory initiative. Also, an Investigation often requires the use and analysis of information not available in EPA data systems. It is best used when addressing issues that are difficult to evaluate during a routine Full Compliance Evaluation because of time constraints, the type of preliminary field work required, and/or the level of analytical expertise needed to determine compliance.

Examples of this category of compliance monitoring are the in-depth PSD/NSR and NSPS reviews conducted by EPA of the pulp, utility and petroleum refining industries. These investigations were initiated following analyses of publicly available information on growth within the industries, and a comparison of this information to data maintained by the regulatory agencies on the number of PSD/NSR permits issued during the same timeframe. The analyses indicated that many facilities failed to obtain the necessary permits. As a result,

the facilities had not controlled pollutant emissions as required, and thus realized significant economic benefits.

For a more complete definition of an Investigation, see "MOA Guidance (Air Program)-Clarification and National Performance Measures Strategy (NPMS) Pilot" from Eric Schaeffer and Elaine Stanley to MOA Coordinators, Enforcement Coordinators, and RS&T Coordinators (October 26, 1998).

VI RECOMMENDED EVALUATION FREQUENCIES

- The following minimum frequencies are recommended:

(1) A Full Compliance Evaluation should be conducted, at a minimum, once every two years at all Title V major sources except those classified as mega-sites. For mega-sites, a Full Compliance Evaluation should be conducted, at a minimum, once every three years.

Each Region, in consultation with affected States/locals, has the flexibility to define and identify mega-sites as it deems appropriate within the Region. However, this universe of facilities is expected to be small. When identifying mega-sites, the Regions should consider the following factors: the number and types of emission units; the volume and character of pollutants emitted; the number and types of control and monitoring systems; the number of applicable regulatory requirements; the availability of monitoring data; the degree of difficulty in determining compliance at individual units and at the entire facility; and the footprint of the facility. Examples of industries that may have qualifying facilities are petroleum refining, integrated steel manufacturing, chemical manufacturing, and pharmaceutical production.

(2) A Full Compliance Evaluation should be conducted, at a minimum, once every five years at synthetic minor sources that emit or have the potential to emit at or above 80 per cent of the Title V major source threshold.

(3) An on-site visit should be conducted, at a minimum, once every five years at all Title V major sources to ensure a compliance presence in the field, verify record reviews, observe modifications or new construction, and identify any major permit deviations.

• In those years when a Full Compliance Evaluation is not conducted, States/locals should continue to review annual compliance certifications, and the underlying reports supporting those certifications (e.g., semi-annual and periodic monitoring reports, continuous emission and continuous parametric monitoring reports, and malfunction and excess emission reports).

VII ALTERNATIVES TO THE RECOMMENDED EVALUATION FREQUENCIES

• States/locals may develop with Regional approval alternatives to the recommended evaluation frequencies. Alternatives may be developed on a facility-by-facility basis, or for an entire source category. However, in determining whether an alternative frequency is appropriate, the following factors should be considered:

- Compliance history,
- Location of facility,
- Potential environmental impact,
- Operational practices (e.g., whether operation is steady state or seasonal),
- Use of control equipment,
- Participation in Agency-sponsored voluntary programs (e.g., Project XL, Performance Track),
- Identified deficiencies in the overall State/local compliance monitoring program.

VIII ELEMENTS OF THE CMS PLAN

• CMS plans should be submitted biennially, consistent with the current EPA two-year MOA planning process. These plans are a building block in the MOA process, and should be finalized so that they can be summarized and incorporated into the Regional MOA submissions to EPA Headquarters. Therefore, they should be completed prior to the beginning of the Federal fiscal year. It is not necessary to duplicate the detailed information in the CMS plan when submitting the Regional MOA response. Rather, Regions should summarize and reference the CMS plans as appropriate.

• A separate CMS plan is not necessary if Regions and States/locals wish to continue using other formally negotiated documents (e.g., Selective Enforcement Agreements, Performance Partnership Agreements, and Grant Agreements), provided these documents contain the same level of detail discussed below. If this approach is selected, the document should specifically state that it satisfies the

CMS plan.

- The content of CMS plans will vary depending upon whether States/locals develop and negotiate alternatives to the minimum frequencies.

- In those instances where States/locals meet the recommended minimum frequencies and do not develop and negotiate alternative approaches, the plan should include the following elements:

  (1) A facility-specific list (including the AFS identification numbers) of all Title V major sources. The list should identify by fiscal year those facilities for which a Full Compliance Evaluation will be conducted. It should also identify those for which an on-site visit will be conducted.

  (2) A facility-specific list (including the AFS identification numbers) of all synthetic minor sources and a list of those facilities covered by the policy. It also should identify by fiscal year those facilities for which a Full Compliance Evaluation will be conducted.

  (3) A description of how a State/local will address any identified program deficiencies in its compliance monitoring program. These deficiencies can stem from evaluations conducted internally, or by outside organizations such as the EPA Office of Inspector General.

- In those instances where the States/locals propose alternatives to the recommended minimum frequencies, States/locals should provide a more detailed plan. In addition to the above elements, States/locals should include a rationale describing: (1) why it is not necessary to evaluate specific facilities or source categories subject to the minimum frequencies; and (2) why it is appropriate to substitute other facilities.

- If at the end of the first year, States/locals anticipate or know that they will be unable to meet their two year commitments by the end of the second year, they should notify the Region and revise their CMS plan accordingly.

- The "Source Compliance and State Action Reporting Information Collection Request" (ICR), OMB Number 2060-0391, will be revised to incorporate the development and submission of this plan.

IX COMPLIANCE MONITORING REPORTS

- States/locals may continue to format compliance monitoring reports as they deem appropriate; however, the following basic elements should be addressed in the reports.

  (1) General information--date, compliance monitoring category (i.e., Full Compliance Evaluation, Partial Compliance Evaluation, or Investigation), and official submitting the report.
  (2) Facility information--facility name, location, mailing address, facility contact and phone number, Title V designation and mega-site designation.
  (3) Applicable requirements--all applicable requirements including regulatory requirements and permit conditions.
  (4) Inventory and description of regulated emission units and processes.
  (5) Information on previous enforcement actions.
  (6) Compliance monitoring activities--processes and emission units evaluated; on-site observations; whether compliance assistance was provided and if so, nature of assistance; any action taken by facility to come back into compliance during on-site visit.
  (7) Findings and recommendations relayed to the facility during the compliance evaluation. Please note, this does not apply to information traditionally reserved for enforcement case files.

  In providing the above information, States/locals should reference or attach other relevant documents as appropriate to avoid duplication. For example, the relevant section of a Title V permit could be attached to the compliance monitoring report rather than rewriting all of the applicable requirements.

- Compliance monitoring reports should be maintained and made available to the Regions upon request. Regions shall maintain similar files of regional activities and provide Headquarters with access upon request.

X REPORTING

- Changes will be made in the national air compliance data base (AIRS/AFS) to facilitate the reporting of information consistent with the revised structure of this policy. In addition, the ICR will be revised to incorporate the new data elements. In order to collect compliance information in a format that allows EPA to evaluate and compare

compliance monitoring programs, Regions and States/locals will need to:

- Continue to maintain records of compliance monitoring activities, and report these activities and the results in AIRS/AFS, or its successor, on a routine basis.

- Continue to designate the High Priority Violator (HPV) status of violating facilities in accordance with the EPA HPV Policy dated December 22, 1998.

- Utilize the following compliance monitoring categories to report activities at the facility level in AIRS/AFS, or its successor:

  - Full Compliance Evaluations
  - Partial Compliance Evaluations
  - Investigations

- Report the following information for all Title V annual compliance certification reviews in AIRS/AFS, or its successor:

  - date due
  - date received
  - whether deviations were reported
  - date reviewed
  - compliance status

Please note: Regions shall enter the first three data elements for each Title V compliance certification unless otherwise negotiated with States/locals.

- Enter the date and results of all stack tests in AIRS/AFS, or its successor, and adjust the HPV status as appropriate.

• The compliance status of a facility will automatically revert from "in compliance" to "unknown" if a Full Compliance Evaluation is not completed:

  - within the recommended minimum evaluation frequencies, or
  - in accordance with negotiated alternatives that extend the recommended minimum evaluation frequencies.

XI EVALUATION/OVERSIGHT

- At the end of each fiscal year, the Regions shall evaluate whether the States/locals met their commitments, and in those cases where they did not, determine why they did not and what adjustments need to be made for the following year. EPA Headquarters shall in turn conduct a similar analysis nationally. This information should be transmitted back to the appropriate officials in a timely manner so that they can make mid-course corrections in their program if necessary.

- Regions periodically shall conduct more in-depth analysis of the compliance monitoring program as a whole. They should look beyond how successful States/locals have been in meeting commitments, and evaluate for example whether adequate inspector training is available; quality monitoring evaluations are being conducted; violations are being found and are significant enough to warrant enforcement action; and data are accurately reported in a timely manner. They should also assess whether States/locals are using an appropriate mix of compliance monitoring techniques, and making full use of all available data. In addition, Regions should attempt to quantify the impact of the compliance monitoring program on parameters such as compliance rates; specific and general deterrence; and moving beyond compliance. To the extent possible, Regions should inform States/locals in advance of the criteria that will be used in the more in-depth analyses.

Regions shall prepare and submit to Headquarters a plan describing the approach and schedule they intend to use for conducting these more in-depth evaluations.

Headquarters shall conduct similar evaluations of each Region, and use the information to monitor implementation of the policy; identify program deficiencies and successes; establish national trends; compare programs; and develop new national priorities. To the extent possible, Headquarters should inform Regions in advance of the criteria that will be used in evaluating Regional programs.

CC: DANA
MISTY
ALAN
SARAH

FYI
Return to
Mike

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
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AIR AND RADIATION DIVISION
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FAX TO: MIKE HOPKINS, JIM ORLEMANN AND TOM RIGO

OFFICE: DAPC

PHONE #: (614) 644-3681 FAX **DATE:** 6/13/97

FROM: KAUSHAL GUPTA

PHONE #: (312)886-6803 **# OF PAGES** (including cover sheet): 6

MESSAGE: Policy from Region 7 on periodic monitoring for opacity. I had e-mailed this to you, but you won't be able to view it without the Adobe Acrobat Reader program.

April 18, 1997

Region 7 Policy on Periodic Monitoring for Opacity

Purpose and Scope

The purpose of this document is to provide guidance to permitting agencies and sources in EPA Region 7 on selecting appropriate periodic opacity monitoring for Title V sources which are subject to an opacity requirement. This policy is intended to encourage consistent application of the periodic monitoring requirements of 40 CFR §70.6(a)(3) and corresponding requirements of permitting agencies. Failure by a permitting agency to consider the policy and to document periodic monitoring in the permits' public record may result in an EPA objection to the permit.

Initial Compliance Certification for Opacity

Part 70 requires that the Title V permit application include an initial compliance certification. It is anticipated that any Title V application not yet submitted as of the date of this guidance will include whatever information is available to document the source's compliance with any generic opacity standard at the time of submission, including the results of any annual state or local agency inspection.

Ongoing Compliance Certification for Opacity

General Principles

Opacity limitations apply during all periods of source operation, except for certain time periods due to startup, shutdown, or malfunction as specified by rule.

Once-a-year or other infrequent inspections by a state or local agency do not satisfy the requirements for ongoing periodic monitoring of opacity. Periodic monitoring is a *source* responsibility.

A source has an obligation to certify, at least once per year or more often as required by the permit authority, whether compliance with the applicable opacity standard was continuous or intermittent. Implicit in this obligation is that the *source* has collected data throughout the compliance period for which they can then rely on when making the *certification*.

To the extent possible, a source should use the appropriate reference method to verify compliance with opacity limits. However, Reference Method 9 and continuous opacity monitors (COMS) are not a practical solution for all situations.

Routine source surveillance, along with record keeping and reporting of the results of the surveillance should provide some assurance that sources are meeting their visible emissions requirements. This daily, routine operation and maintenance practice results in more environmental benefit than less frequent, "official" compliance determinations.

It is not practical for a state or local agency to inspect every facility on a frequency that provides meaningful assurance that they are meeting their visible emission requirements on a continuous basis. To minimize any doubts, the permit authority should require the source to certify at least annually -- or more frequently -- that they conducted a visible emissions survey each day the plant operated and that they were in compliance with, or in violation of, with the applicable opacity requirements. Public complaints and department inspections should also help to verify the validity of source observations.

General Strategy

Even though preferred, COMS or Method 9 readings may not be appropriate for every situation. For example, COMS or Method 9 readings on clean gas-fired boilers or internal combustion engines, or other infrequently operated equipment may not provide fruitful results. The following approach outlines a hierarchy that can be used to select the appropriate "monitoring" technique for each piece of air pollution equipment at a plant. Where appropriate, the permit authority may elect to mix the "tiers" to match the appropriate situation.

Tier 1

COMS are the preferred visible emissions measurement technique. COMS create an unbiased, continuous, and permanent record of opacity. In conjunction with a periodic quality assurance program and the regulatory authority's ability to use "any credible evidence" to establish a violation, COMS may be used to assess whether a source is in compliance. Where the source already has a COMS, the instrument would be used as the periodic monitoring device.

COMS are appropriate for vents or stacks which carry a major portion of the plant's particulate or other condensible emission streams. For example, coal-fired boilers are good candidates for COMS. In addition, any other equipment for which an NSPS establishes a COMS requirement -- whether NSPS affected or not -- should be considered strong candidates for COMS. EPA has already verified that COMS are both technically and economically feasible for a large number of emission units, including industrial, institutional, commercial, and utility steam boilers firing other than natural gas or "clean" fuel oil, fluidized catalytic cracking units, portland cement kilns and clinker coolers, primary metal smelters, ferroalloy and steel arc furnaces, pulp mill recovery furnaces, glass melting furnaces, rotary lime kilns, and phosphate rock and other mineral dryers, calciners, and grinders. The above list is not meant to limit the source types for which COMS may be appropriate, but instead provides examples of the sources types for which COMS already work.

When evaluating Title V permit applications that involve emissions units at the source types described above, the presumption is that COMS will be specified by the permit authority as the opacity measurement method. The responsibility to show that COMS are not technically or economically feasible for a particular installation, and that lesser monitoring under Tiers 2 or 3 is more appropriate, rests with the permit applicant.

Tier 2

Alternatives to COMS may be acceptable if such devices are not technically or economically practical. For example, wet, condensible plumes or roof vents that exceed the practical path length of an opacity monitor present technical challenges for which COMS may not be appropriate. In addition, the economics of installing COMS on multiple opacity emission points or low capacity factor units may not be justifiable. In these cases, lesser monitoring under Tiers 2 and 3 may be appropriate. Reasons for selecting lesser monitoring requirements under Tiers 2 and 3 should be fully explained in the permit statement of basis or other documents contained in the permit administrative record.

"Lesser monitoring" may include visual observations by Reference Method 9, a plant-wide visible emissions survey, measurement of other surrogate parameters, or a combination of one or more of these measures to evaluate whether opacity is likely being met or not.

Visual Observations

Method 9 is the preferred visual observation method. To the extent practicable, a source should attempt to record daily opacity measurements on each emission point subject to an opacity standard. Of course, readings would only be required when the emission unit is operating and when the weather conditions allow. Method 9 data may be used by EPA, the state or local agency, and the public as direct evidence of an opacity violation.

In those cases where Method 9 readings are impractical because of a large number of emission points or because a certified Method 9 observer is not available, the source representative would note the visible emissions performance of the plant each operating day. Specifically, the source would first conduct a quick survey of the entire plant. In most cases, this "qualitative" assessment shouldn't take more than 10-15 minutes, even for complex sources. The source representative would maintain a daily log noting 1) whether any air emissions (except for water vapor) were visible from the plant, 2) all emission points from which visible emissions occurred, and 3) whether the visible emissions were normal for the process. If no visible or other significant emissions are observed then no further observations would be required.

For those emission points with visible emissions perceived or believed to exceed the applicable opacity standard, the source representative would attempt to record formal Method 9 readings for the emission points of concern. If Method 9 readings can not be obtained, the source would also indicate 1) the color of the emissions, 2) whether the emissions were light or heavy, 3) the cause of the abnormal emissions, and 4) any

FYI

OhioEPA

INTER-OFFICE COMMUNICATION

Ohio Environmental Protection Agency

Date: January 27, 1999

To: Distribution List

From: John Sadzewicz, Acting Deputy Director, Water Programs

Subject: **Compliance with all Applicable Laws when Issuing Permits ("Bessie Williams" Case Precedent)**

During recent discussions with Ohio EPA's legal office and the Ohio Attorney General's Office, it has become clear our various permitting programs are failing to determine compliance with all applicable laws prior to final issuance of permits to install or plan approvals. Ohio EPA must ascertain compliance with all "applicable laws" when issuing a PTI. This determination is based on OAC Rule 3745-31 and a 1994 appeal ruling by the ERAC. The case, Bessie Williams et al. v. Schregardus, 1994 Ohio ENV Lexis 5, (April 19, 1994) states that before the Agency issues a permit, compliance with all applicable laws must be established. The term "applicable laws" is defined as any applicable provision of ORC Chapters 3704 (air), 3734 (solid and hazardous waste), 3745 (procedures) and 6111 (water); any OAC regulations adopted under those ORC Chapters; the Clean Air Act; the Federal Water Pollution Control Act; and U.S. EPA regulations. If you are interested in reading the ruling or need more details on this ruling, please contact Julianne Kurdila, Jeanne Mallet or Ed Tormey in Legal.

The following is a proposed procedure to ensure that all applicable laws have been evaluated and that the evaluation is documented. Please review the following procedure, and provide comments within two weeks of the above date.

Proposed New Procedure

Since most PTI applications are received and reviewed in the District Offices, the District Office staff will be responsible for evaluating the PTIs and making a recommendation. Managers and Supervisors of the affected programs will be responsible for informing their staff of this procedure and ensuring implementation.

District Office Permit Reviews. For permit applications normally received and reviewed at the District Offices, the public information specialist (or whomever is assigned the task of logging permit applications in and handling the checks) will contact the appropriate Divisions within their office requesting a review of the project and applicability of other permits, using the attached form. The parts of the permit application applicable to the other Divisions should be sent, with a copy of the form, to the Section Manager of that Division. If additional permits are deemed necessary, the lead staff person in the

Division receiving the initial application will inform the applicant in writing and provide information on a contact person within the Division requesting a permit application.

Central Office Permit Reviews. For permits normally reviewed at Central Office (general PTIs, livestock PTIs and plans, and DEFA PTI reviews), the lead CO staff person assigned to the project will send the attached form to the District Office Section Manager for their program requesting a review of the project and the applicability of other laws. The request shall be accompanied by the appropriate parts of the PTI application and any necessary supporting documentation such as construction, operation and waste management plans. The District Section Manager receiving the application shall be responsible for passing the request onto the other Divisions in the District Office and getting a response back to the CO staff person responsible for the project. If additional permits are deemed necessary, the lead CO staff person will inform the applicant in writing and provide information on a contact person within the Division requesting a permit application.

It is critical that adequate documentation be present in our records demonstrating that each project was reviewed independently for compliance with all applicable laws.

For non-antidegradation projects, no PTI should be recommended for approval until the reviewer is certain that applications for all applicable permits have been received. If the antidegradation rule has been triggered, all permits should be reviewed simultaneously and the final actions issued at approximately the same time.

The Divisions of Air Pollution Control and Solid and Infectious Waste are developing similar procedures and will issue them when complete.

If you have any questions, please contact George Elmaraghy, Assistant Chief, DSW.

Distribution list:

District Chiefs
Division Chiefs
DSW Section managers (CO and DO)
Ed Tormey, Legal

Julianne Kurdila, Legal
Joan DeMartin, Legal
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99 JAN 28 PM 5:11
LEGAL OFFICE

pc: Jenny Tiell, DIR
Kate Bartter, DIR
George Elmaraghy, DSW

MULTI-MEDIA PERMIT TO INSTALL OR PLAN APPROVAL INPUT FORM

NOTIFICATION DATE:_____

TO: _____

FROM: _____

SUBJECT: _____

DATE RECEIVED AT OEPA: _____

APPLICATION TYPE: DAPC DSW DSIWM DD&GW
(circle one or more)

APPLICATION NUMBER: _____

FACILITY NAME: _____

FACILITY CONTACT NAME: _____

FACILITY CONTACT PHONE NUMBER: _____

PROJECT DESCRIPTION: _____

_____

LOCATION (include county): _____

_____

INPUT DATE: Please complete the remaining portion of this form and return to

_____ by _____

(Unit Supervisor) (Within 10 days of request)

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1. Does your division need to be involved in the issuance of this PTI or Plan Approval?
   ___ Yes ___ No

2. If so, what kind of involvement do you recommend? (Circle one)

   Combined PTI standard or special conditions coordination only

3. Name: _____ Division: _____

Note: If a multi-media PTI or plan approval is recommended the affected Division staff should meet to coordinate. The appropriate Unit Supervisors or Assistant District Chief can be consulted to help coordinate if necessary. DAPC should coordinate with local air agencies as necessary.

Inter-office Memorandum

To: Dan Aleman, Canton Health Department
Ed Fasko, Cleveland Division of the Environment
Lynn Malcolm, Akron Regional Air Quality Management District

From: Dennis Bush, Ohio EPA, NEDO DB

Date: January 14, 1999

Subject: Besse Williams Decision

As a result of the Besse Williams decision, there needs to be some changes in the manner that PTI's are reviewed. Two other Ohio EPA divisions (Solid Waste and Surface Water) need to be informed about every PTI that is processed by DAPC. Likewise, DAPC needs to be informed about every PTI processed by those two divisions.

The Besse Williams decision involved a surface water PTI that was appealed to the Environmental Review Appeals Commission (ERAC). The PTI was revoked because DAPC (and other divisions) had not been given an opportunity to decide if there were any regulatory requirements resulting from their rules.

To accomplish this at NEDO, we have developed a form (attached) to be used for this purpose. The local air agencies need to be involved in this since you process a lot of PTI's.

The preliminary procedure we have developed is as follows:

1) For PTI applications for non-air projects received at NEDO:

   a) Our Administrative Assistant (Lily Aaron) will log the application, complete the new form, and distribute the form to the two non-directly involved divisions (including me).

   b) For those applications in your counties, I will attempt to decide if there is any need for a DAPC PTI. This will be based primarily on the project description. If there appears to be no need for air involvement (eg. a sewer line extension), I will complete the form and return it to the involved division. For some of these where the decision is not clear cut and especially if

the company is Title 5, I will need to send you the form to complete (bottom part) and return to me within one week. I will then route your completed form back to the involved division.

c) On the bottom part of the form, if you circle NO, you will need to explain why on the back of the form. Possible explanations would be: "appears likely to be deminimis per OAC 3745-15-05"; "exempt per OAC 3745-31-03(A)(1)(g)"; or "not an air contaminant source". There may be other explanations. If you circle YES, you will need to pursue obtaining a PTI application for the air contaminant source.

2) For PTI applications received at the locals:

a) You will need to complete the top part of the form and send it to me.

b) I will route it to the other divisions and return the completed forms to you. Hopefully this can all be done within one week. The original copy of the form will need to be kept in your file and a copy should be attached to the PTI worksheet.

We need to begin this procedure immediately. Please begin with any PTI applications that are received after January 18, 1999.

A refinement of this procedure may occur within the next month or two. If you have any questions, please let me know.

cc: Tom Rigo, DAPC
Cindy DeWulf, DAPC
Mike Hopkins, DAPC
Mike Ahern, DAPC
Bill Skowronski, NEDO
Bob Wysenski, NEDO

NEDO MULTI-MEDIA PTI INPUT FORM
(Temporary form 1-12-99)

Notification Date:_____
To: Dennis Bush, DAPC
Judy Bowman, DSIWM
Dennis Lee, DSW
From: Lily Aaron
Subject: **Recently Received PTI**

Date Received: _____

Application Type: DAPC DSW DSIWM

Application No.:_____
Facility Name:_____
Facility Contact Name:_____
Facility Contact Phone No.:_(_____)
Project Description:_____

Location (include county):_____

Input Due Date: Please complete the remaining portion of this input form and return to the circled name: Dennis Bush By_____
Judy Bowman
Dennis Lee
Keep a copy of this form in your files. _____
****

1. Does your division need to be involved in the issuance of this PTI? YES NO
(Circle one)

If "NO", please explain the reason on the back side of this form.

2. If "YES", what kind of involvement do you recommend? (Circle one)

Combined PTI issue separate PTI's Other(explain):

Name: Division Date

Note: If a multi-media PTI or Plan Approval is recommended, the affected division staff should meet to coordinate. The appropriate Unit Supervisors or the Assistant District Chief can be consulted to help coordinate if necessary. Also, please let Lily know if there will be a combined PTI. Dennis Bush(DAPC) will coordinate with Air Locals as necessary.

Please explain the reason why your division does not need to be involved in the issuance of this PTI:_____

_____
_____
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_____
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_____
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_____

Mike W
FOR YOUR FILES
Bob

JAN 27 1995

IN THE COURT OF APPEALS OF OHIO

TENTH APPELLATE DISTRICT

Bessie Williams et al.,	:	Nos. 94APH05-712,
		94APH05-891,
Appellants-Appellees,	:	94APH05-892,
		94APH05-893,
v.	:	94APH05-894,
		94APH05-895,
Donald R. Schregardus, Director of Environmental Protection,	:	94APH05-896,
		94APH05-897,
	:	94APH05-898,
Appellee-Appellant,		94APH05-899,
	:	94APH05-900,
Oeder and Sons Garage, Inc.,		94APH05-901,
	:	94APH05-902,
Appellee-Appellee,		94APH05-903,
	:	and 94APH05-904,
	:	(REGULAR CALENDAR)
Albert Meeks, et al.,	:	
Appellants-Appellees,	:	Nos. 94APH05-713,
		94APH05-905,
v.	:	94APH05-906,
		94APH05-907,
Donald R. Schregardus, Director of Environmental Protection,	:	94APH05-908,
		94APH05-909,
	:	94APH05-910,
Appellee-Appellant,		and 94APH05-911
	:	
Buckeye Ready-Mix Concrete, Inc.,		(REGULAR CALENDAR)
	:	
Appellee-Appellee.		
	:	

O P I N I O N

Rendered on October 13, 1994

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Young & Alexander Co., L.P.A., and *A. Mark Segreti, Jr.*, for Albert Meeks et al.

Lee Fisher, Attorney General, and *John K. McManus*, for Donald R. Schregardus.

Rendigs, Fry Kiely & Dennis, and *Jonathan Saxton*, for Oeder and Sons Garage, Inc.

Kevin J. Happer Co., and *Kevin J. Happer*, for Buckeye Ready-Mix Concrete, Inc.

APPEAL from the Environmental Board of Review

TYACK, J.

On September 5, 1991, Oeder and Sons Garage, Inc., ("Oeder") filed an application with the director of the Ohio Environmental Protection Agency ("OEPA") for a Permit to Install ("PTI") an air contaminant source. Oeder is a diesel fuel storage and dispensing facility located in Lebanon, Ohio. Specifically, Oeder sought a PTI for three 10,000 gallon diesel fuel tanks and one 4,000 gallon diesel fuel tank. On January 15, 1992, a PTI was issued to Oeder by the OEPA. In a separate action, Buckeye Ready-Mix Concrete, Inc., ("Buckeye"), a concrete plant also located in Lebanon, Ohio, filed for a PTI for a 4.2 MMBTU #2 oil-fired boiler. On January 23, 1992, the PTI was issued by the OEPA.

In February 1992, several area residents (hereinafter "appellees") filed what the Environmental Board of Review ("EBR") later construed as a Notice of Appeal regarding both PTIs with the EBR. The parties agreed to proceed with

one hearing on both matters. A hearing was held on August 18, 1993 and on April 19, 1994, the EBR issued its findings of fact, conclusions of law and final order which vacated the director's issuance of the PTIs and remanded the matter to the director for further consideration. The OEPA, Oeder and Buckeye (hereinafter "appellants") have appealed to this court, assigning one error for our consideration:

> "The Environmental Board of Review erred in holding that when an applicant requests a permit to install or plan approval under OAC 3745-31-05, Ohio EPA must review virtually every state and federal environmental regulation and determine that the emission source is in compliance with every one of these regulations prior to issuing a permit."

In reaching its decision to remand the matter to the director, the EBR stated that the director based his decision to issue the PTIs only upon consideration of applicable air regulations. (Conclusion of law No. 3.) The EBR concluded that additional matters should have been considered; however, it did not state specifically what those matters were. The EBR's findings of fact do indicate that appellees were concerned with the effect of the tanks and boiler on their wells and with the location of the tanks and boiler on a sole source aquifer. Alan Lloyd, Environmental Scientist in the OEPA's Division of Air, testified that upon application for a PTI for an air contaminant source, he considered only ambient air quality standards and Division of Air regulations and no water regulations. As stated above, the EBR remanded the matter to the director for consideration of additional matters.

Appellants contend that the EBR's order is erroneous because Ohio Adm.Code 3745-31-05 limits the director's scope of review to only those regulations that apply to the type of emissions for which a permit is sought, here, air contaminants. Appellants contend that the EBR's order requires the OEPA to review essentially every state and federal environmental regulation. In reviewing the order of the EBR, we are bound by the standard of review set forth in R.C. 3745.06, which states:

> "The court shall affirm the order complained of in the appeal if it finds, upon consideration of the entire record and such additional evidence as the court has admitted, that the order is supported by reliable, probative, and substantial evidence and is in accordance with law."

The issue presented for our review, whether or not the director should have considered more than just air regulations in reviewing these particular PTI applications, involves the interpretation of Ohio Adm.Code 3745-31-05 and related provisions. Ohio Adm.Code 3745-31-05 states, in pertinent part:

> "(A) The director shall issue a permit to install or a plan approval, on the basis of the information appearing in the application, or information gathered by or furnished to the Ohio environmental protection agency, or both, if he determines that the installation or modification and operation of the air contaminant source, solid waste disposal facility, water pollution source, disposal system, land application of sludge, or public water system will:

> "(1) Not prevent or interfere with the attainment or maintenance of applicable ambient water quality standards or ambient air quality standards; and
>
> "(2) Not result in a violation of any *applicable laws*, including but not limited to:
>
> "(a) Effluent standards adopted by the director or administrator of the United States environmental protection agency;
>
> "(b) Emission standards adopted by the Ohio EPA;
>
> "(c) Federal standards of performance for new stationary sources adopted by the administrator of the United States environmental protection agency pursuant to section 111 of the Clean Air Act ***;
>
> "(d) Requirements regarding non-attainment areas, as defined in section 171 et seq. of the Clean Air Act ***." (Emphasis added.)

Appellants contend that the above-emphasized language can be interpreted either of two ways. One, "applicable laws" means only those provisions that apply to the type of emission sought in the permit or, two, "applicable laws" means any relevant environmental regulations that may apply to the facility regardless of whether it relates to the PTI sought. Appellants, of course, argue that "applicable laws" means only those provisions relating to the type of PTI sought. We disagree.

A plain reading of Ohio Adm.Code 3745-31-05 supports the EBR's order below. By its very language, Ohio Adm.Code 3745-31-05 contemplates that a review of an application for a PTI for diesel fuel storage tanks or an oil-fired boiler may involve consideration of regulations other than only air regulations. Ohio

Adm.Code 3745-31-05(A) states that a PTI will be issued only if the "*** air contaminant source *** [or] water pollution source *** will (1) [n]ot prevent or interfere with the attainment or maintenance of applicable ambient water quality standards ***." Even if one looks at the tanks and boiler as air contaminant sources only and not as water pollution sources, those air contaminant sources still cannot prevent or interfere with attainment or maintenance of ambient water quality standards. Of course, these tanks and the boiler may also be considered water pollution sources. Therefore, the effect these tanks and the boiler may have on ambient water quality in relation to the relevent standards must be considered.

In addition, Ohio Adm.Code 3745-31-05(A)(2)(a) states that the director will issue a PTI only if the air contaminant or water pollution source will "[n]ot result in a violation of any applicable laws, including but not limited to *** [e]ffluent standards adopted by the director or the administrator of the United States environmental protection agency ***." "Applicable laws" is defined, in Ohio Adm.Code 3745-31-01(F) as the: "*** applicable provisions *** rules, regulations, and orders of the Ohio EPA; the Clean Air Act, *** *the Federal Water Pollution Control Act*, *** and rules and regulations of the administrator of the United States environmental protection agency." (Emphasis added.) Thus, "applicable laws" expressly includes water pollution regulations. In addition, the applicable rules and regulations of the United States EPA, which include regulations other than just air regulations, must be considered. Ohio

Adm.Code 3745-31-05(A)(2)(a) expressly includes effluent standards in the "applicable laws" which cannot be violated by installation of the pollution source. Effluent standards encompass regulations with regard to the prevention of water pollution.

Although it is a discretionary provision, Ohio Adm.Code 3745-31-05(C) lends support to our ruling. Ohio Adm.Code 3745-51-05(C) states:

> "In deciding whether to grant or deny a permit to install or plan approval, the director may take into consideration the social and economic impact of the air contaminants, *water pollutants, or other adverse environmental impact* that may be a consequence of issuance of the permit to install or plan approval." (Emphasis added.)

The fuel tanks and boiler in question will be located on an aquifer and, thus, a leak or other accident could have considerable social and economic impact on the community. Such a possibility may be considered by the director upon remand.

Thus, in light of the plain language in Ohio Adm.Code 3745-31-05 and considering the location of the tanks and boiler on an aquifer, the director was obligated to consider more than just air pollution regulations. The facts of the case and the Ohio Adm.Code demand nothing less. Contrary to appellants' contention, the director is not required to look at *every* rule and regulation. On the facts of these PTI applications, more than air pollution regulations had to be considered; certainly, relevant water pollution regulations should have been considered. Hence, the EBR's order remanding the matter to the director for

further consideration is supported by reliable, probative and substantial evidence and is in accordance with law. Accordingly, appellants' sole assignment of error is overruled.

Having overruled appellants' assignment of error, the final order of the EBR is hereby affirmed.

Judgment affirmed.

YOUNG and PETREE, JJ., concur.

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Ohio EPA
Division of Air Pollution Control
inter-office communication

to: Distribution

from: Tom Tucker, Environmental Supervisor, through Mike Hopkins, P.E., Manager, AQMPS

subject: Radionuclide Topics: Partial Recision of Subpart I; Draft Interim Permitting Guideline; Draft Permit by Rule

date: April 24, 1997

The following items should be considered when determining the permit requirements for sources having radionuclide emissions to the ambient air.

1. On December 30, 1996, US EPA rescinded the radionuclide NESHAP (40 CFR 61, Subpart I) as it applied to NRC-licensed facilities other than commercial power reactors. (The commercial power reactors were removed from Subpart I on September 5, 1995.) The US EPA has determined that the NRC requirements are sufficient to control these facilities to an equivalent degree of safety and that NRC is capable of enforcing those regulations. This action removes the requirement for these facilities to list radionuclide in their Title V applications.

2. I am distributing draft guidance for the permitting of all other radionuclide NESHAP sources for your review and comment. This document describes the circumstances where permits are required for federal facilities emitting radionuclides and the provisions that should be included in those permits. The Ohio EPA has generally determined that permits must be obtained for sources that are required to submit annual reports or "applications to construct or modify" under the NESHAP. This document will be redrafted and released in the form of an engineering guideline. Suggested permit terms and conditions are being drafted and will be attached to the engineering guide when it is released.

3. Also being distributed for review and comment is a draft of the permit by rule exemption for radionuclide sources whose radionuclide emissions are insignificant enough that the sources are not regulated by the radionuclide NESHAP.

Please submit any comments that you have on items 2 and 3 to Tom Tucker, DAPC-CO before May 12, 1997. Thank you.

Distribution:

Bob Hodanbosi, Chief
Cindy DeWulf, Asst. Chief
DAPC Section Managers
District Air Unit Supervisors
LAA Directors
AQMPS-NSR Specialists

Radionuclide NESHAP Permitting Procedures -- Interim Guidance

The radionuclide national emission standards for hazardous air pollutants (NESHAP) generally prevent the emission of radionuclides from federal facilities that would cause any member of the public to receive a dose of 10 mrem/yr effective dose equivalent (ede) and limit the emission of radon from radium-containing material [40 CFR 61, Subparts H, I and Q]. Federal facilities owned or operated by US DOE are governed by Subparts H and Q, and the remaining federal facilities (primarily USDOD and NASA) are subject to Subpart I. Nuclear Power Plants and NRC-licensed facilities have been exempted from Subpart I by US EPA. Until rules are adopted by Ohio EPA to address the issuing of permits to sources of radionuclides, DAPC is instituting the following practices for reviewing permits at facilities subject to the radionuclide NESHAP.

This guidance is based, prior to the adoption of rules, on:

- The explicit inclusion of "radionuclides" as air contaminants [ORC 3704.01(B), OAC 3745-31-01(C)];
- The permit requirements for air contaminant sources [OAC 3745-31-02(A),OAC 3745-35-02(A)];
- The exclusion of NESHAP sources from permit to install exemptions [OAC 3745-31-03(A)(1)];
- The inclusion of NESHAP requirements for Title V sources [OAC 3745-77-01(H)(4),OAC 3745-77-03(C)(9) and (C)(10)]; and, finally,
- The NESHAP requirements themselves [40 CFR 61].

<u>For US DOE facilities (Subparts H and Q):</u>

A) All US DOE facilities presently are subject to Subparts H and the K-65 Silos at the Fernald Environmental Management Project, in Fernald, Ohio are subject to Subpart Q.

B) Any new or modified radionuclide source at a DOE facility that would cause any member of the public to receive a dose of <u>0.10 mrem/yr ede or greater</u> or <u>emit more than 20 pCi/m^2-s of radon-222 into the air</u> shall require a PTI and either a PTO or Title V permit from Ohio EPA and an 'Approval to Construct or Modify' from USEPA (40 CFR 61.96). After OEPA receives a delegation of authority from US EPA for the radionuclide NESHAP a PTI will satisfy the 'Approval to Construct or Modify' requirements. Each PTI, PTO, or Title V Permit should include the following special radionuclide provisions, in addition to provisions for other pollutants:

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1) An annual radionuclide emission limit that shall not be exceeded over any 12 month period. This emission limit may either be expressed as a mass rate of a specific radionuclide (gm/yr) or a radioactivity release rate for total radionuclides (Ci/yr). The annual radionuclide emission limit shall not cause a dose to the public that exceeds 10 mrem/yr ede (using either the CAP-88 or COMPLY models).

2) All emission points shall be monitored for radionuclides that contribute greater than 10% of the dose that would result from an uncontrolled release under normal full operation of the source. Rather than monitoring, an alternative method may be used to determine these emissions with prior approval from US EPA.

3) An annual report meeting the requirements of 40 CFR 61.94 shall be submitted to the Director by June 30 of each year.

4) If the emission is a result of an approved remediation under CERCLA, then no permits are necessary, but the above requirements must still be met.

C) Any new or modified source at a US DOE facility with radionuclide emissions that would cause any member of the public to receive a dose of <u>less than 0.10 mrem/yr ede</u> from the new or modified source shall not require a PTI or PTO, nor be included as an emission unit in a Title V Permit (although it would still be listed as an "insignificant activity" in a Title V Permit), providing the following conditions are met (note that a PTI, PTO or Title V Permit may still be required for nonradionuclide emissions):

1) The facility is in compliance with Subpart H as of the most recent annual NESHAP report and can demonstrate that the dose resulting from all emissions from the new source is less than 0.10 mrem/yr ede (this demonstration need not be submitted, but must be maintained onsite).

2) The radionuclide emissions from the new or modified source shall be included in the next annual NESHAP report for the full facility, if one is required under 40 CFR 61.94.

3) All records generated or used to meet conditions (1) and (2) must be maintained onsite for at least 5 years.

4) The Director or their authorized representative shall be allowed on the premises during reasonable hours for the purposes of reviewing all records and verifying that the facility is in compliance with all air pollution law.

5) These sources will be subject to a future rule-making to revise OAC 3745-31-03(A)(4) to permit these sources by rule.

For other non-DOE federal facilities (Subpart I):

A) Any new facility subject to 40 CFR 61, Subpart I, having radionuclide emissions that would cause any member of the public to receive a dose of 0.10 mrem/yr ede or greater will be required to apply for and obtain at least one permit to install and, if Title V is not applicable, a permit to operate for its radionuclide emitting sources. If the facility is a Title V facility, then the Title V permit shall address the enforceable requirements of Subpart I. The PTI(s), PTO(s) and/or Title V Permit(s) will include the following special radionuclide provisions, in addition to provisions for other pollutants:

1) An annual emission limit that will not be exceeded over any 12 month period. This emission limit may either be expressed as a mass rate of a specific radionuclide (gm/yr) or a radioactivity release rate for total radionuclides (Ci/yr). The annual radionuclide emission limit shall not cause a dose to the public that exceeds 10 mrem/yr ede (using the COMPLY model).

2) All release points shall be monitored for radionuclides that contribute greater than 10% of the dose that would result from an uncontrolled release under normal full operation of the source. Rather than monitoring, an alternative method may be used to determine these emissions with prior approval from US EPA.

3) An annual report meeting the requirements of 40 CFR 61.104 shall be submitted to the Director by March 31 of each year, if the facility emitted radionuclides in an amount that would have caused any member of the public to receive a dose of 1.0 mrem/yr ede during the previous year.

4) If the emission is a result of an approved remediation under CERCLA, then no permits are necessary, but the above requirements must still be met.

B) Any facilities subject to 40 CFR 61, Subpart I, having radionuclide emissions that would cause any member of the public to receive a dose of less than 0.10 mrem/yr ede and all new or modified radionuclide sources that would cause any member of the public to receive a dose of less than 0.10 mrem/yr ede at larger facilities shall not require PTI's or PTO's, nor be included in a Title V Permit (except as a listed "insignificant activity"), providing the following conditions are met (note that a PTI, PTO

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or Title V Permit may still be required to address non-radionuclide emissions):

1) The facility is in compliance with Subpart I as of the most recent calendar year and can demonstrate that the dose resulting from all emissions from the new source is less than 0.10 mrem/yr ede (this demonstration need not be submitted, but must be maintained onsite).

2) The radionuclide emissions from the new or modified source are included in the next annual NESHAP report for the full facility, if one is required under 40 CFR 61.104.

3) All records generated or used to meet conditions (1) and (2) must be maintained onsite for at least 5 years.

4) The Director or their authorized representative shall be allowed to enter the premises during reasonable hours for the purposes of reviewing all records and verifying that the facility is in compliance with all air pollution law and these provisions.

5) These sources will be subject to a future rule-making to revise OAC 3745-31-03(A)(4) to permit these sources by rule.

C) Applications for 'Approvals to Construct or Modify' under 40 CFR 61.106 are required to be filed with USEPA if any of the following conditions are met. After OEPA receives a delegation of authority from USEPA for the radionuclide NESHAP, a PTI will satisfy the 'Approval to Construct or Modify' requirements.

1) New facilities subject to 40 CFR 61, Subpart I, having radionuclide emissions that would cause any member of the public to receive a dose of 1.0 mrem/yr ede or greater;

2) New or modified sources having radionuclide emissions that would cause any member of the public to receive a dose of 0.10 mrem/yr ede or greater and that are located at facilities having radionuclide emissions that would cause any member of the public to receive a dose of 1.0 mrem/yr ede or greater; or

3) New or modified radionuclide sources of any size at facilities subject to 40 CFR 61, Subpart I, having total facility radionuclide emissions that would cause any member of the public to receive a dose of 1.0 mrem/yr ede or greater, if the most recent annual report showed that the facility was not in compliance with 40 CFR 61, Subpart I.

[jtt:prmtplcy.wpd:04/9/97]

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3745-31-03 Permit to install exemptions.

(A) A permit to install as required by rule 3745-31-02 of the Administrative Code must be obtained for the installation or modification of a new air contaminant source unless exempted from the requirements as follows:

.....

(4) Permit-by-rule exemptions

The following air contaminant sources are exempt from the requirement to obtain a permit to install. These exemptions are valid only as long as the owner or operator collects and maintains the records described for each air contaminant source exempted under this rule and these monthly records are retained in the owner or operator's files for a period of not less than five years and are made available to the director or any authorized representative of the director for review during normal business hours:

(a) Emergency electrical generators or emergency firefighting water pumps greater than 50 horsepower that operate for no more than 500 hours per rolling 12 month period and that burn gasoline, natural gas, distillate oil (with less than or equal to 0.5 per cent by weight sulfur), or liquid petroleum gas and that maintain the following records:

(i) Monthly records that contain the rolling twelve month hours of operation; and

(ii) Records that show the type of fuel used and the sulfur content (in per cent by weight) of any distillate oil used.

(b) AIR CONTAMINANT SOURCES HAVING RADIONUCLIDE EMISSIONS TO THE AMBIENT AIR THAT DO NOT EXCEED THOSE AMOUNTS THAT WOULD CAUSE A MEMBER OF THE PUBLIC TO RECEIVE IN ANY YEAR AN EFFECTIVE DOSE EQUIVALENT OF 0.1 MREM/YEAR AND PROVIDED THAT THE OWNER OR OPERATOR COMPLIES WITH THE FOLLOWING:

(i) THE STATIONARY SOURCE COMPLIES WITH THE REQUIREMENTS OF ALL APPLICABLE NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS, 40 CFR PART 61.

(ii) COPIES OF ALL REPORTS REQUIRED UNDER THE NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS ARE SENT TO THE DIRECTOR IN A TIMELY MANNER.

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(iii) RECORDS REQUIRED UNDER THE NATIONAL STANDARDS FOR HAZARDOUS AIR POLLUTANTS ARE MADE AVAILABLE FOR INSPECTION UPON REQUEST BY THE DIRECTOR OR HIS AUTHORIZED REPRESENTATIVE.

(iv) IF THE EFFECTIVE DOSE EQUIVALENT FOR ANY SOURCE EXEMPTED UNDER THIS RULE IS CALCULATED TO EXCEED 0.1 MREM PER YEAR, THEN AN APPLICATION FOR A PERMIT TO INSTALL SHALL BE SUBMITTED TO THE DIRECTOR OR HIS AUTHORIZED REPRESENTATIVE AT THE SAME TIME AS THE ANNUAL REPORT IS REQUIRED TO BE SUBMITTED.

(v) THE DIRECTOR OR AN AUTHORIZED REPRESENTATIVE WILL BE GRANTED REASONABLE ACCESS TO THE FACILITY FOR THE PURPOSE OF INSPECTING RECORDS AND DETERMINING COMPLIANCE WITH ANY APPLICABLE LAWS.

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interoffice
MEMORANDUM

to: Radionuclide NESHAP Contacts

from: Tom Tucker

subject: Radionuclide NESHAP Grant Guidance

date: September 5, 1995

ANNOUNCING: We have been awarded a supplemental grant from US EPA to pay for the ongoing Radionuclide NESHAP permitting activities and training and preparation for a full delegation of authority for the Radionuclide NESHAPs.

BEGINNING WITH THIS CURRENT PAY PERIOD: Please retroactively code the time spent in FFY 1995 (from Oct 1,1994 through Sep 30, 1995) on permit or other radionuclide NESHAP-related activities using the Grant Reporting Code "RN95" (including: inspections, public meetings, training, etc). Note that there are only TWO pay periods remaining in which to code work to this grant. Do not code overtime hours to this grant, unless the time worked actually consisted of overtime hours.

BEGINNING WITH FEDERAL FISCAL YEAR 1996: At the present time US EPA has not yet awarded FFY 96 Air Grants, including an extension of the radionuclide NESHAP grant. So, keep track of time spent on radionuclide NESHAP activities, but do not code any time to RN96 until instructed to do so.

IF YOU HAVE ANY QUESTIONS about this grant or any radionuclide NESHAP activities, please contact Tom Tucker (4-3699).

NESHAPs Proposal/Promulgation Dates Since 11/15/90

40 CFR	Category	Proposed	Promulgated
Part 63, Subpart A	NESHAP for Source Categories: General Provisions	8/11/93	3/16/94
Part 62, Subparts F-I	Hazardous Organic NESHAP (HON) [Synthetic Organic Chemical Manufacturing, and Certain Processes Subject to Negotiated Leak Regulations]	12/31/92 10/15/93 10/24/94 10/28/94 4/10/95	4/22/94 6/6/94 9/20/94 1/27/95 4/10/95
Part 63, Subparts F-I	HON: Regulated Cyanide Compounds	08/95	10/95
Part 63, Subpart L	Coke Oven Batteries NESHAP	12/4/92	10/27/93
Part 63, Subpart M	Perchloroethylene Dry Cleaning NESHAP	12/9/91 10/1/92	9/22/93 12/20/93
Part 63, Subpart N	Chromium Electroplating and Anodizing NESHAP	12/16/93	1/25/95 5/24/95
Part 63, Subpart O	Ethylene Oxide Commercial Sterilizer NESHAP	3/7/94	12/6/94
Part 63, Subpart Q	Industrial Process Cooling Towers NESHAP	8/12/93	9/8/94
Part 63, Subpart R	Stage I Gasoline Distribution Facilities NESHAP	2/8/94	12/14/94 2/8/95 6/26/95
Part 63, Subpart S	Pulp and Paper Industry NESHAP: Combustion	10/95	11/97
Part 63, Subpart S	Pulp and Paper: Non-Combustion	12/17/93	11/97
Part 63, Subpart S	Pulp and Paper: Mechanical, Nonwood Chemical	11/96	11/97
Part 63, Subpart T	Halogenated Solvent Cleaning NESHAP	11/29/93	12/2/94 12/30/94 6/5/95
Part 63, Subpart U	Polymers and Resins NESHAP, Group I	6/12/95	5/15/96
Part 63, Subpart V	Polymers and Resins NESHAP, Group IV	3/29/95	3/15/96
Part 63, Subpart W	Polymers and Resins NESHAP, Group II	5/16/94	3/8/95
Part 63, Subpart X	Secondary Lead Smelters NESHAP	6/9/94 4/19/95	6/23/95
Part 63, Subpart Y	Marine Vessel Loading/Unloading NESHAP	5/13/94 3/8/95	6/30/95

40 CFR	Category	Proposed	Promulgated
Part 63, Subpart AA	Phosphoric Acid Manufacturing Industry NESHAP	11/95	11/96
Part 63, Subpart BB	Phosphate Fertilizers Production Industry NESHAP	11/95	11/96
Part 63, Subpart CC	Petroleum Refineries NESHAP	7/15/94	6/30/95
Part 63, Subpart DD	Off Site Waste and Recovery Operations NESHAP	10/13/94	11/15/95
Part 63, Subpart EE	Magnetic Tape Manufacturing Operations NESHAP	3/11/94	12/15/94
Part 63, Subpart GG	Aerospace Manufacturing and Rework NESHAP	6/6/94 11/22/94	7/31/95
Part 63, Subpart HH	Oil and Natural Gas Production NESHAP	7/95	7/96
Part 63, Subpart II	Shipbuilding/Ship Repair Surface Coating NESHAP	12/6/94	11/15/95
Part 63, Subpart JJ	Wood Furniture Manufacturing NESHAP	12/6/94	11/15/95
Part 63, Subpart KK	Printing/Publishing Industry NESHAP	3/14/95 4/3/95	3/1/96
Part 63, Subpart LL	Primary Aluminum Plant NESHAP	10/95	11/96
Part 63, Subpart MM	Sulfite Pulping Industry NESHAP: Combustion	12/95	-------
Part 63, Subpart NN	Baker's Yeast Manufacturing Industry NESHAP	10/95	10/96
Part 63	Tetrahydrobenzaldehyde (Butadiene Dimer) NESHAP	7/95	-------
Part 63	Steel Pickling, HCl Process NESHAP	11/95	11/96
Part 63	Wood Treatment Industry NESHAP	11/95	11/96
Part 63	Primary Copper Smelters NESHAP	12/95	12/96
Part 63	Publicly Owned Treatment Works (POTW) NESHAP	12/95	12/96
Part 63	Flexible Polyurethane Foam Production NESHAP	1/96	-------
Part 63	Portland Cement Manufacturing NESHAP	2/96	2/97
Part 63	Chlorine Production NESHAP	3/96	-------

Bright

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5
230 SOUTH DEARBORN ST.
CHICAGO, ILLINOIS 60604

REPLY TO THE ATTENTION OF:
(5RA-14)

1 JUN 1988

CERTIFIED MAIL RETURN
RECEIPT REQUESTED

'88 JUN -7 A8:20

Richard L. Shank, Ph.D
Director
Ohio Environmental Protection Agency
P. O. Box 1049, 1800 WaterMark Drive
Columbus, Ohio 43266-0149

Dear Dr. Shank:

This letter transmits to you the revised Delegation of Authority which allows the State of Ohio to implement and enforce the New Source Performance Standards (NSPS) and the National Emission Standards for Hazardous Air Pollutants (NESHAPS). The revised delegation includes a list of NSPS and NESHAPS sections which cannot be delegated to the State because they involve regulation setting and amending actions that require notification in the Federal Register.

We have reviewed the pertinent procedures and supporting regulations of the State of Ohio, and have determined that the State has an adequate program for the implementation and enforcement of the NSPS and NESHAPS.

A notice announcing this delegation will be published in the Federal Register in the near future. This delegation becomes effective as of the date of this letter and, unless the United States Environmental Protection Agency receives written notice from the Ohio Environmental Protection Agency within ten days of the receipt of this letter, it will be deemed that the State has accepted all the terms and conditions of this delegation.

We trust that this amended delegation will provide for a more efficient NSPS and NESHAPS enforcement program in Ohio.

Sincerely yours,

Valdas V. Adamkus

Valdas V. Adamkus
Regional Administrator

DELEGATION OF AUTHORITY

NEW SOURCE PERFORMANCE STANDARDS

In accordance with Clean Air Act Section 111(c), and subject to the specific terms and conditions set forth below, the United States Environmental Protection Agency (USEPA) hereby delegates authority to the State of Ohio to implement and enforce the New Source Performance Standards (NSPS) as follows:

A. Authority for all sources located or to be located in the State of Ohio subject to the NSPS promulgated in 40 CFR Part 60. This delegation includes all future standards promulgated for additional pollutants and source categories and all revisions and amendments to existing and future standards. The delegation of authority to enforce future standards, revisions, and amendments will be effective as of the date that such standards become applicable.

B. This delegation of authority for NSPS supersedes the previous statewide delegations of August 4, 1976, November 5, 1979, August 27, 1980, August 9, 1982, and January 10, 1985, and is subject to the following terms and conditions:

1. Upon approval of the Regional Administrator of Region V, the Director of the Ohio Environmental Protection Agency (OEPA) may subdelegate this authority to implement and enforce the NSPS to other air pollution control authorities in the State when such authorities have demonstrated that they have equivalent or more stringent programs in force.

2. The State of Ohio will at no time grant a waiver of compliance with NSPS. The State of Ohio may grant variances from State standards which are more stringent than the NSPS, so long as the variances do not prevent compliance with the NSPS.

3. The Federal regulations in 40 CFR Part 60, as amended, do not have provisions for granting waivers by class of testing requirements or variances, hence this delegation does not convey to the State of Ohio authority to grant waivers by class of testing requirements or variances from NSPS regulations. Ohio may waive a performance test or specify the use of a reference method with minor changes in methodology under 40 CFR 60.8(b) on a case-by-case basis, however, the State must inform USEPA of such actions within 30 days.

4. The State of Ohio will utilize the methods specified in appendices and Subparts of 40 CFR Part 60 in performing source tests pursuant to the regulations.

5. Enforcement of NSPS in the State of Ohio will be the primary responsibility of the State of Ohio. Enforcement shall be consistent with USEPA's "Timely and Appropriate" guidance. If, after appropriate discussion with the OEPA, the Regional Administrator determines that a

State procedure for implementing and enforcing the NSPS is not in compliance with Federal regulations (40 CFR Part 60), or is not being effectively carried out, this delegation will be revoked in whole or in part. Any such revocation shall be effective as of the date specified in a Notice of Revocation to the Director of the OEPA.

6. The OEPA and the USEPA Region V will develop a system of communication for the purpose of insuring that each office is informed on (a) the current compliance status of subject sources in the State of Ohio; (b) the interpretation of application regulations; (c) the description of sources and source inventory data; and (d) the decisions the State makes where the State is delegated certain discretionary authority in the following sections: 40 CFR 60.8(b)(4), 40 CFR 60.8(c), 40 CFR 60.46(b), and 40 CFR 60.46(d). The reporting and notification provisions in 40 CFR Part 60, requiring industry to make submissions to the USEPA, are met by sending such submissions to the OEPA. The OEPA will make available this information to the USEPA on a case-by-case basis.

   OEPA's annual report, submitted to USEPA pursuant to 40 CFR Part 51, will include information relating to the status of sources subject to 40 CFR Part 60. Such information will include the name, address, type and size of each facility, date facility commenced operation, date of most recent stack test, compliance status of facility, enforcement actions initiated, surveillance action undertaken for each facility, and results of reports relating to emissions data.

7. Prior USEPA concurrence is to be obtained on any matter involving the interpretation of Section 111 of the Clean Air Act or 40 CFR Part 60 to the extent that implementation, administration, or enforcement of these sections have not been covered by determinations or guidance sent to the OEPA. All applicability determinations, including those submitted under 40 CFR 60.5, which have not been specifically treated in the Compendium of Applicability Determinations issued by USEPA are reserved for USEPA.

8. If the State of Ohio determines that a violation of a delegated NSPS exists, the OEPA shall, within 30-days of detection of the violation, notify USEPA, Region V of the nature of the violations together with a brief description of the State's efforts or strategy to secure compliance. Furthermore, if the State determines that it is unable to enforce a NSPS standard, the State shall immediately notify USEPA, Region V. This delegation in no way limits the Administrator's concurrent enforcement authority as provided in Section 111(c)(2) of the Clean Air Act.

9. In addition to any future provision which may be cited in forthcoming NSPS which cannot be delegated, the Administrator retains authority for the regulation setting and amending aspects of (1) those sections of the NSPS listed in the Appendix to this delegation of authority for NSPS, which is hereby incorporated as part of this delegation; (2) approval of equivalency for design, equipment, work practice, operational standard or combinations thereof pursuant to Section 111(h) of the Clean Air Act; and (3) for the granting of an innovative technology waiver pursuant to Section 111(j) of the Clean Air Act. The State is delegated authority for implementing such decisions made by the Administrator.

10. If the State of Ohio determines that for any reason, it is unable to administer the program with respect to any new or existing NSPS, the Director of the OEPA will notify the Regional Administrator. Upon such notification by the State, the primary enforcement responsibility for such standards will return to the USEPA.

Valdas V. Adamkus
Regional Administrator

June 1, 1988
Date

Appendix - NSPS

The following sections of the NSPS are not delegated by the USEPA to the State for implementation and enforcement. These sections either require rulemaking in the Federal Register or require Federal overview in order to ensure national consistency.

1. Subpart A
   60.8(b)(2)
   60.8(b)(3)
   60.11(e)

2. Subpart Da
   60.45a

3. Subpart Ka
   60.114a

4. Subpart S
   60.135(b)

5. Subpart DD
   60.302(d)(3)

6. Subpart GG
   60.332(a)(3)
   60.335(a)(1)(ii)

7. Subpart VV
   60.482-1(c)(2)
   60.484

8. Subpart WW
   60.493(b)(2)(i)(A)*
   60.496(a)(1)

9. Subpart GGG
   60.592(c)

10. Subpart JJJ
    60.623

* For last sentence only concerning values of Se and Sh

DELEGATION OF AUTHORITY

NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS

In accordance with Clean Air Act Section 112(d), and subject to the specific terms and conditions set forth below, the United States Environmental Protection Agency (USEPA) hereby delegates authority to the State of Ohio to implement and enforce the National Emission Standards for Hazardous Air Pollutants (NESHAPS) as follows:

A. Authority for all sources located or to be located in the State of Ohio subject to the NESHAPS promulgated in 40 CFR Part 61 except Subparts B, H, I and K related to radionuclides. This delegation includes all future standards promulgated for additional pollutants and source categories and all revisions and amendments to existing and future standards. The delegation of authority to enforce future standards, revisions, and amendments will be effective as of the date that such standards become applicable.

B. This delegation of authority for NESHAPS supersedes the previous statewide delegations of August 9, 1982, and January 10, 1985, and is subject to the following terms and conditions:

1. Upon approval of the Regional Administrator of Region V, the Director of the Ohio Environmental Protection Agency (OEPA) may subdelegate this authority to implement and enforce the NESHAPS to other air pollution control authorities in the State when such authorities have demonstrated that they have equivalent or more stringent programs in force.

2. The State of Ohio will at no time grant a waiver of compliance with NESHAPS except as provided in 40 CFR 61.11. The State of Ohio may grant variances from State standards which are more stringent than the NESHAPS, so long as the variances do not prevent compliance with the NESHAPS.

3. The Federal regulations in 40 CFR Part 61, as amended, do not have provisions for granting waivers by class of testing requirements or variances, hence this delegation does not convey to the State of Ohio authority to grant waivers by class of testing requirements or variances from NESHAPS regulations. Ohio may on a case-by-case basis approve minor modifications to sampling procedures or equipment that affect single sources under 40 CFR 61.14, however the State must inform USEPA of such actions within 30 days.

4. The State of Ohio will utilize the methods specified in appendices and Subparts of 40 CFR Part 61 in performing source tests pursuant to the regulations.

5. Enforcement of NESHAPS in the State of Ohio will be the primary responsibility of the State of Ohio. Enforcement shall be consistent with USEPA's "Timely and Appropriate" guidance. If, after appropriate discussion with the OEPA, the Regional Administrator determines that a State procedure for implementing and enforcing the NESHAPS is not in compliance with Federal regulations (40 CFR Part 61), or is not being effectively carried out, this delegation will be revoked in whole or in part. Any such revocation shall be effective as of the date specified in a Notice of Revocation to the Director of the OEPA.

6. The OEPA and the USEPA Region V will develop a system of communication for the purpose of insuring that each office is informed on (a) the current compliance status of subject sources in the State of Ohio; (b) the interpretation of application regulations; (c) the description of sources and source inventory data; and (d) the decisions the State makes where the State is delegated certain discretionary authority in 40 CFR 61.154(b). Except for the provisions of 40 CFR 61.146 concerning asbestos demolition and renovation, the reporting and notification provisions in 40 CFR Part 61, requiring industry to make submissions to the USEPA, are met by sending such submissions to the OEPA. The OEPA will make available this information to the USEPA on a case-by-case basis. Information required by 40 CFR 61.146 must be submitted to both USEPA and OEPA.

   OEPA's annual report, submitted to USEPA pursuant to 40 CFR Part 51, will include information relating to the status of sources subject to 40 CFR Part 61. Such information, will include the name, address, type and size of each facility, date facility commenced operation, date of most recent stack test, compliance status of facility, enforcement actions initiated, surveillance action undertaken for each facility, and results of reports relating to emissions data.

7. Prior USEPA concurrence is to be obtained on any matter involving the interpretation of Section 112 of the Clean Air Act or 40 CFR Part 61 to the extent that implementation, administration, or enforcement of these sections have not been covered by determinations or guidance sent to the OEPA. All applicability determinations, including those submitted under 40 CFR 61.06, which have not been specifically treated in the Compendium of Applicability Determinations issued by USEPA are reserved for USEPA.

8. If the State of Ohio determines that a violation of a delegated NESHAPS exists, the OEPA shall, within 30-days of detection of the violation, notify USEPA, Region V of the nature of the violations together with a brief description of the State's efforts or strategy to secure compliance. Furthermore, if the State determines that it is unable to enforce a NESHAPS standard, the State shall immediately notify USEPA, Region V. This delegation in no way limits the Administrator's concurrent enforcement authority as provided in Section 112(d)(2) of the Clean Air Act.

9. In addition to any future provision which may be cited in forthcoming NESHAPS which cannot be delegated, the Administrator retains authority for the regulation setting and amending aspects of (1) those sections of the NESHAPS listed in the Appendix to this delegation of authority for NESHAPS, which is hereby incoporated as part of this delegation; and (2) approval of equivalency for design, equipment, work practice, operational standard or combinations thereof pursuant to Section 112(e) of the Clean Air Act. The State is delegated authority for implementing such decisions made by the Administrator.

10. If the State of Ohio determines that for any reason, including budget reductions, it is unable to administer the program with respect to any new existing NESHAPS, the Director of the OEPA will notify the Regional Administrator. Upon such notification by the State, the primary enforcement responsibility for such standards will return to the USEPA.

Valdas V. Adamkus
Regional Administrator

June 1, 1988
Date

Appendix NESHAPS

The following sections of the NESHAPS are not delegated by the USEPA to the State for implementation and enforcement. These sections either require rulemaking in the Federal Register or require Federal overview in order to ensure national consistency.

1. Subpart A
   61.04(b)
   61.12(d)(1)
   61.13(h)(1)(ii)
   61.16

2. Subpart E
   61.53(c)(4)*

3. Subpart J
   61.112(c)

3. Subpart N
   61.164(a)(2)
   61.164(a)(3)

4. Subpart O

   61.172(b)(2)(ii)(B)
   61.172(b)(2)(ii)(C)
   61.174(a)(2)
   61.174(a)(3)

5. Subpart V
   61.242-1(c)(2)
   61.244

* Restricted delegation applies only to development of list.

LIST OF NSPS CATEGORIES

40 CFR 60 SUBPART	SOURCE CATEGORY	DATE PROPOSED
D	Fossil Fuel Fired Steam Gen. after 08/17/71	08/17/71
~~Da~~	~~Electric Utility Steam Gen. after 09/18/78~~	~~09/19/78~~
Db	Industrial/Commercial/Institutional Steam Generating Units	06/19/84
Dc	Small Industrial/Commercial/Institutional Steam Generating Units after 06/09/89	06/09/89
E	Incinerators	08/17/91
Ea	Municipal Waste Combustors after 12/20/89	12/20/89
Eb	Municipal Waste Combustors after 09/20/94 PROPOSED	09/20/94
F	Portland Cement Plants	08/17/71
G	Nitric Acid Plants	08/17/71
H	Sulfuric Acid Plants	07/17/71
	- amended -	
I	Asphalt Concrete Plants	06/11/73
J	Petroleum Refineries	06/11/78-10/04/76
	- amended -	01/17/84
K	Storage Vessel for Petroleum Liquids Constr. after 06/11/73; Prior to 05/19/78	06/11/73
Ka	Storage Vessel for Petroleum Liquids Constr. after 05/18/78	05/18/73
Kb	V.O. Liquid Storage Vessel after 07/23/84	07/23/84
L	Secondary Lead Smelters	06/11/73
M	Secondary Brass, Bronze & Ingot Prod.	06/11/73
N	Basic Oxygen Process Furnaces (Iron and Steel Plants) - Primary Emissions	06/11/73
Na	Basic Oxygen Process Furnaces Steelmaking - Secondary Emissions	01/20/83
O	Sewage Treatment Plants	06/11/73
P	Primary Copper Smelters	10/16/74
Q	Primary Zinc Smelters	10/16/74
R	Primary Lead Smelters	10/16/74
S	Primary Aluminum Reduction Plts.	10/23/74
T	Phosphate Fert. Wet Phos. Acid	10/22/74
U	Phosphate Fert. Super Phos. Acid	10/22/74
V	Phos. Fert. Diammonium Phos. Acid	10/22/74
W	Phos. Fert. Triple Super Phos. Acid	10/22/74
X	Phos. Fert. Granular Tri. Sup. Phos. Acid Stg.	10/22/74
Y	Coal Preparation Plants	10/24/74
Z	Ferroalloy Production Facilities	10/21/74
AA	Steel Plants; Electric Arc Furnaces	10/21/74
AAa	Steel Plants Electric Arc Furn. & Argon-O_2	08/17/83
BB	Kraft Pulp Mills	09/24/76
	- amended -	09/24/76
CC	Glass Manufacturing Plants	06/15/79
DD	Grain Elevators	08/03/78
EE	Industrial Surface Coating; Metal Furniture	11/28/80
FF	Stationary Internal Combustion Engines PROPOSED	07/23/79
GG	Stationary Gas Turbines	10/03/77
HH	Lime Manufacturing Plants	09/02/82
II	Sodium Carbonate	(Withdrawn)
JJ	Organic Solvent Cleaners/ Cold Cleaning Machines PROPOSED	Proposed withdrawal of 06/11/80 and New 09/09/94
KK	Lead-Acid Battery Manufacturing	01/14/80
LL	Metallic Minerals Pro. Plants	08/24/82
MM	Auto & L-DT Surface Coating Operations	08/09/82
NN	Phosphate Rock Processing Plants	09/21/79
OO	Perchloroethylene Drycleaners	11/25/80
PP	Ammonium Sulfate Manufacturing	02/04/80

QQ	Graphic Arts Ind. Publication Rotogravure	02/04/80
RR	Pressure Sensitive Tape & Label Surface	10/28/80
SS	Industrial Surface Coating; Appliances	12/24/80
TT	Metal Coil Surface Coating	01/05/81
UU	Asphalt Processing & Asphalt Roofing Mfg.	05/26/81
VV	VOC Fugitive Emission; Synthetic Organ. Chem. (SOCMI)	01/05/81
WW	Beverage Can Surface Coating	11/26/80
XX	Bulk Gasoline Terminals	12/17/80
ZZ	Industrial Boilers	
AAA	Residential Wood Heaters after 07/01/88 of 07/01/90	02/18/87
BBB	Rubber Products Ind., Tire Mfg.	01/20/83
CCC	Non-Fossil Fuel Fire Boilers	
DDD	Polymer Mfg. Industry (VOC) 09/30/87 or 01/10/89	09/30/87
EEE	By-Product Coke Oven Bettery Stacks	(Not Developed)
FFF	Flexible Vinyl & Urethane Coating & Printing	01/18/83
GGG	Refinery Fugitive Emissions	01/04/83
HHH	Synthetic Fibers Mfg.	11/23/82
III	Synthetic Organic Chemical Mfg. Ind. Air Oxid.	10/21/83
JJJ	Petroleum Drycleaners	12/14/82
KKK	On-shore N.G. Process. Plts.; VOC Equip. Leaks	01/20/84
LLL	On-shore N.G. Process; SO_2 Emissions	01/20/84
MMM	Coke Oven Wet Quenching	(Not Developed)
NNN	Synthetic Organic Chem. Mfg. Ind. Distillation Op.	01/20/84
OOO	Non-metallic Mineral Processing Plts.	08/31/83
PPP	Wool Fiberglass Insulation Mfg. Plts.	02/07/84
QQQ	VOC Emissions from Petroleum Refinery Wastewater Systems	05/04/87
RRR	SOCMI Reactor Processes after 06/29/90	06/29/90
SSS	Magnetic Tape Manufacturing Industry	01/22/86
TTT	Surface Coating of Plastic Parts of Business Machines	01/08/86
UUU	Calciners and Dryers in Mineral Industry	04/23/86
VVV	Polymeric Coating of Supporting Substrates Facilities	04/30/87
WWW	Municipal Solid Waste (MSW) Landfills PROPOSED	05/30/91
	Starch Production PROPOSED	09/08/94

Revised 12/5/95

Bob H

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5
230 SOUTH DEARBORN ST.
CHICAGO, ILLINOIS 60604

REPLY TO THE ATTENTION OF:
(5RA-14)

1 JUN 1988 1988

CERTIFIED MAIL RETURN
RECEIPT REQUESTED

'88 JUN -7 AM 8:20

Richard L. Shank, Ph.D
Director
Ohio Environmental Protection Agency
P. O. Box 1049, 1800 WaterMark Drive
Columbus, Ohio 43266-0149

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We have reviewed the pertinent procedures and supporting regulations of the State of Ohio, and have determined that the State has an adequate program for the implementation and enforcement of the NSPS and NESHAPS.

A notice announcing this delegation will be published in the Federal Register in the near future. This delegation becomes effective as of the date of this letter and, unless the United States Environmental Protection Agency receives written notice from the Ohio Environmental Protection Agency within ten days of the receipt of this letter, it will be deemed that the State has accepted all the terms and conditions of this delegation.

We trust that this amended delegation will provide for a more efficient NSPS and NESHAPS enforcement program in Ohio.

Sincerely yours,

Valdas V. Adamkus
Regional Administrator

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B. This delegation of authority for NSPS supersedes the previous statewide delegations of August 4, 1976, November 5, 1979, August 27, 1980, August 9, 1982, and January 10, 1985, and is subject to the following terms and conditions:

1. Upon approval of the Regional Administrator of Region V, the Director of the Ohio Environmental Protection Agency (OEPA) may subdelegate this authority to implement and enforce the NSPS to other air pollution control authorities in the State when such authorities have demonstrated that they have equivalent or more stringent programs in force.

2. The State of Ohio will at no time grant a waiver of compliance with NSPS. The State of Ohio may grant variances from State standards which are more stringent than the NSPS, so long as the variances do not prevent compliance with the NSPS.

3. The Federal regulations in 40 CFR Part 60, as amended, do not have provisions for granting waivers by class of testing requirements or variances, hence this delegation does not convey to the State of Ohio authority to grant waivers by class of testing requirements or variances from NSPS regulations. Ohio may waive a performance test or specify the use of a reference method with minor changes in methodology under 40 CFR 60.8(b) on a case-by-case basis, however, the State must inform USEPA of such actions within 30 days.

4. The State of Ohio will utilize the methods specified in appendices and Subparts of 40 CFR Part 60 in performing source tests pursuant to the regulations.

5. Enforcement of NSPS in the State of Ohio will be the primary responsibility of the State of Ohio. Enforcement shall be consistent with USEPA's "Timely and Appropriate" guidance. If, after appropriate discussion with the OEPA, the Regional Administrator determines that a

State procedure for implementing and enforcing the NSPS is not in compliance with Federal regulations (40 CFR Part 60), or is not being effectively carried out, this delegation will be revoked in whole or in part. Any such revocation shall be effective as of the date specified in a Notice of Revocation to the Director of the OEPA.

6. The OEPA and the USEPA Region V will develop a system of communication for the purpose of insuring that each office is informed on (a) the current compliance status of subject sources in the State of Ohio; (b) the interpretation of application regulations; (c) the description of sources and source inventory data; and (d) the decisions the State makes where the State is delegated certain discretionary authority in the following sections: 40 CFR 60.8(b)(4), 40 CFR 60.8(c), 40 CFR 60.46(b), and 40 CFR 60.46(d). The reporting and notification provisions in 40 CFR Part 60, requiring industry to make submissions to the USEPA, are met by sending such submissions to the OEPA. The OEPA will make available this information to the USEPA on a case-by-case basis.

   OEPA's annual report, submitted to USEPA pursuant to 40 CFR Part 51, will include information relating to the status of sources subject to 40 CFR Part 60. Such information will include the name, address, type and size of each facility, date facility commenced operation, date of most recent stack test, compliance status of facility, enforcement actions initiated, surveillance action undertaken for each facility, and results of reports relating to emissions data.

7. Prior USEPA concurrence is to be obtained on any matter involving the interpretation of Section 111 of the Clean Air Act or 40 CFR Part 60 to the extent that implementation, administration, or enforcement of these sections have not been covered by determinations or guidance sent to the OEPA. All applicability determinations, including those submitted under 40 CFR 60.5, which have not been specifically treated in the Compendium of Applicability Determinations issued by USEPA are reserved for USEPA.

8. If the State of Ohio determines that a violation of a delegated NSPS exists, the OEPA shall, within 30-days of detection of the violation, notify USEPA, Region V of the nature of the violations together with a brief description of the State's efforts or strategy to secure compliance. Furthermore, if the State determines that it is unable to enforce a NSPS standard, the State shall immediately notify USEPA, Region V. This delegation in no way limits the Administrator's concurrent enforcement authority as provided in Section 111(c)(2) of the Clean Air Act.

9. In addition to any future provision which may be cited in forthcoming NSPS which cannot be delegated, the Administrator retains authority for the regulation setting and amending aspects of (1) those sections of the NSPS listed in the Appendix to this delegation of authority for NSPS, which is hereby incorporated as part of this delegation; (2) approval of equivalency for design, equipment, work practice, operational standard or combinations thereof pursuant to Section 111(h) of the Clean Air Act; and (3) for the granting of an innovative technology waiver pursuant to Section 111(j) of the Clean Air Act. The State is delegated authority for implementing such decisions made by the Administrator.

10. If the State of Ohio determines that for any reason, it is unable to administer the program with respect to any new or existing NSPS, the Director of the OEPA will notify the Regional Administrator. Upon such notification by the State, the primary enforcement responsibility for such standards will return to the USEPA.

Valdas V. Adamkus
Regional Administrator

June 1, 1988
Date

Appendix - NSPS

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1. Subpart A
   60.8(b)(2)
   60.8(b)(3)
   60.11(e)

2. Subpart Da
   60.45a

3. Subpart Ka
   60.114a

4. Subpart S
   60.195(b)

5. Subpart DD
   60.302(d)(3)

6. Subpart GG
   60.332(a)(3)
   60.335(a)(1)(ii)

7. Subpart VV
   60.482-1(c)(2)
   60.484

8. Subpart WW
   60.493(b)(2)(i)(A)*
   60.496(a)(1)

9. Subpart GGG
   60.592(c)

10. Subpart JJJ
    60.623

* For last sentence only concerning values of Se and Sh

DELEGATION OF AUTHORITY

NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS

In accordance with Clean Air Act Section 112(d), and subject to the specific terms and conditions set forth below, the United States Environmental Protection Agency (USEPA) hereby delegates authority to the State of Ohio to implement and enforce the National Emission Standards for Hazardous Air Pollutants (NESHAPS) as follows:

A. Authority for all sources located or to be located in the State of Ohio subject to the NESHAPS promulgated in 40 CFR Part 61 except Subparts B, H, I and K related to radionuclides. This delegation includes all future standards promulgated for additional pollutants and source categories and all revisions and amendments to existing and future standards. The delegation of authority to enforce future standards, revisions, and amendments will be effective as of the date that such standards become applicable.

B. This delegation of authority for NESHAPS supersedes the previous statewide delegations of August 9, 1982, and January 10, 1985, and is subject to the following terms and conditions:

1. Upon approval of the Regional Administrator of Region V, the Director of the Ohio Environmental Protection Agency (OEPA) may subdelegate this authority to implement and enforce the NESHAPS to other air pollution control authorities in the State when such authorities have demonstrated that they have equivalent or more stringent programs in force.

2. The State of Ohio will at no time grant a waiver of compliance with NESHAPS except as provided in 40 CFR 61.11. The State of Ohio may grant variances from State standards which are more stringent than the NESHAPS, so long as the variances do not prevent compliance with the NESHAPS.

3. The Federal regulations in 40 CFR Part 61, as amended, do not have provisions for granting waivers by class of testing requirements or variances, hence this delegation does not convey to the State of Ohio authority to grant waivers by class of testing requirements or variances from NESHAPS regulations. Ohio may on a case-by-case basis approve minor modifications to sampling procedures or equipment that affect single sources under 40 CFR 61.14, however the State must inform USEPA of such actions within 30 days.

4. The State of Ohio will utilize the methods specified in appendices and Subparts of 40 CFR Part 61 in performing source tests pursuant to the regulations.

5. Enforcement of NESHAPS in the State of Ohio will be the primary responsibility of the State of Ohio. Enforcement shall be consistent with USEPA's "Timely and Appropriate" guidance. If, after appropriate discussion with the OEPA, the Regional Administrator determines that a State procedure for implementing and enforcing the NESHAPS is not in compliance with Federal regulations (40 CFR Part 61), or is not being effectively carried out, this delegation will be revoked in whole or in part. Any such revocation shall be effective as of the date specified in a Notice of Revocation to the Director of the OEPA.

6. The OEPA and the USEPA Region V will develop a system of communication for the purpose of insuring that each office is informed on (a) the current compliance status of subject sources in the State of Ohio; (b) the interpretation of application regulations; (c) the description of sources and source inventory data; and (d) the decisions the State makes where the State is delegated certain discretionary authority in 40 CFR 61.154(b). Except for the provisions of 40 CFR 61.146 concerning asbestos demolition and renovation, the reporting and notification provisions in 40 CFR Part 61, requiring industry to make submissions to the USEPA, are met by sending such submissions to the OEPA. The OEPA will make available this information to the USEPA on a case-by-case basis. Information required by 40 CFR 61.146 must be submitted to both USEPA and OEPA.

   OEPA's annual report, submitted to USEPA pursuant to 40 CFR Part 51, will include information relating to the status of sources subject to 40 CFR Part 61. Such information, will include the name, address, type and size of each facility, date facility commenced operation, date of most recent stack test, compliance status of facility, enforcement actions initiated, surveillance action undertaken for each facility, and results of reports relating to emissions data.

7. Prior USEPA concurrence is to be obtained on any matter involving the interpretation of Section 112 of the Clean Air Act or 40 CFR Part 61 to the extent that implementation, administration, or enforcement of these sections have not been covered by determinations or guidance sent to the OEPA. All applicability determinations, including those submitted under 40 CFR 61.06, which have not been specifically treated in the Compendium of Applicability Determinations issued by USEPA are reserved for USEPA.

8. If the State of Ohio determines that a violation of a delegated NESHAPS exists, the OEPA shall, within 30-days of detection of the violation, notify USEPA, Region V of the nature of the violations together with a brief description of the State's efforts or strategy to secure compliance. Furthermore, if the State determines that it is unable to enforce a NESHAPS standard, the State shall immediately notify USEPA, Region V. This delegation in no way limits the Administrator's concurrent enforcement authority as provided in Section 112(d)(2) of the Clean Air Act.

9. In addition to any future provision which may be cited in forthcoming NESHAPS which cannot be delegated, the Administrator retains authority for the regulation setting and amending aspects of (1) those sections of the NESHAPS listed in the Appendix to this delegation of authority for NESHAPS, which is hereby incoporated as part of this delegation; and (2) approval of equivalency for design, equipment, work practice, operational standard or combinations thereof pursuant to Section 112(e) of the Clean Air Act. The State is delegated authority for implementing such decisions made by the Administrator.

10. If the State of Ohio determines that for any reason, including budget reductions, it is unable to administer the program with respect to any new existing NESHAPS, the Director of the OEPA will notify the Regional Administrator. Upon such notification by the State, the primary enforcement responsibility for such standards will return to the USEPA.

Valdas V. Adamkus
Regional Administrator

June 1, 1988
Date

Appendix NESHAPS

The following sections of the NESHAPS are not delegated by the USEPA to the State for implementation and enforcement. These sections either require rulemaking in the Federal Register or require Federal overview in order to ensure national consistency.

1. Subpart A
   61.04(b)
   61.12(d)(1)
   61.13(h)(1)(ii)
   61.16

2. Subpart E
   61.53(c)(4)*

3. Subpart J
   61.112(c)

3. Subpart N
   61.164(a)(2)
   61.164(a)(3)

4. Subpart O

   61.172(b)(2)(ii)(B)
   61.172(b)(2)(ii)(C)
   61.174(a)(2)
   61.174(a)(3)

5. Subpart V
   61.242-1(c)(2)
   61.244

* Restricted delegation applies only to development of list.

LIST OF NSPS CATEGORIES

40 CFR 60 SUBPART	SOURCE CATEGORY	DATE PROPOSED	DATE FINALIZED
D	FF Fired Steam Gen. after 8/17/71	8/17/71	12/23/71
Da	Electric Utility Steam Gen. after 9/18/78	9/19/78	6/11/79
Db	Industrial/Commerical/Institutional Steam Generating Units	6/19/84	11/25/86
E	Incinerators	8/17/71	12/23/71
F	Portland Cement Plants	8/17/71	12/23/71
G	Nitric Acid Plants	8/17/71	12/23/71
H	Sulfuric Acid Plants	7/17/71	12/23/71
	- amended -		9/29/83
I	Asphalt Concrete Plants	6/11/73	3/8/74
J	Petroleum Refiners	6/11/73 - 10/4/76	3/8/74
	- amended -	1/17/84	
K	Storage Vessel for Petroleum Liquids Constr. after 6/11/73; Prior to 5/19/78	6/11/73	3/8/74
Ka	Storage Vessel for Petroleum Liquids Constr. after 5/18/78	5/18/73	4/4/80
Kb	V.O. Liquid Storage Vessels after 7/23/84	7/23/84	4/4/87
L	Secondary Lead Smelters	6/11/73	3/8/74
M	Secondary Brass, Bronze & Ingot Prod.	6/11/73	3/8/74
N	Iron & Steel Plants	6/11/73	3/8/74
Na	Basic Oxygen Process Furnaces	1/20/83	1/2/86
O	Sewage Treatment Plants	6/11/73	3/8/74
P	Primary Copper Smelters	10/16/74	1/15/76
Q	Primary Zinc Smelters	10/16/74	1/15/76
R	Primary Lead Smelters	10/16/74	1/15/76
S	Primary Aluminum Reduction Plts.	10/23/74	1/26/75
T	Phosphate Fert. Wet Phos. Acid	10/22/74	8/6/75
U	Phosphate Fert. Super Phos. Acid	10/22/74	8/6/75
V	Phos. Fert. Diammonium Phos. Acid	10/24/74	8/6/75
W	Phos. Fert. Triple Super Phos.	10/22/74	8/6/75
X	Phos. Fert. Granular Tri. Sup. Phos. Stg.	10/22/74	8/6/75
Y	Coal Preparation Plants	10/24/74	1/15/76
Z	Ferroalloy Production Facilities	10/21/74	5/4/76
AA	Steel Plants	10/21/74	9/23/75
AAa	Steel Plants; Electric Arc Furnaces	8/17/83	10/31/84
BB	Kraft Pulp Mills	9/24/76	2/23/78
	- amended -	9/24/76	7/20/83
CC	Glass Manufacturing Plants	6/15/79	10/7/80
DD	Grain Elevators	8/3/78	8/3/78
EE	Industrial Surface Coating; Metal Furniture	11/28/80	10/29/82
FF	Stationary Internal Combustion Engines	7/23/79	
GG	Stationary Gas Turbines	10/3/77	7/31/84
HH	Lime Manufacturing Plants	9/2/82	4/26/84
II	Sodium Carbonate	(Withdrawn 9/22/81)	
JJ	Organic Solvent Cleaners	6/11/80	
KK	Lead-Acid Battery Manufacturing	1/14/80	4/16/82
LL	Metallic Minerals	8/24/82	2/21/84
MM	Auto & L-DT Surface Coating Operations	8/9/82	2/4/83
NN	Phosphate Rock Processing Plants	9/21/79	4/16/82
OO	Perchloroethylene Drycleaners	11/25/80	
PP	Ammonium Sulfate Manufacturing	2/4/80	11/12/80

LIST OF NSPS CATEGORIES

40 CFR 60 SUBPART	SOURCE CATEGORY	DATE PROPOSED	DATE FINALIZED
QQ	Graphic Arts Ind. Publication Rotogravure	2/4/80	11/8/82
RR	Pressure Sensitive Tape & Label Surface	10/28/80	10/18/83
SS	Industrial Surface Coating; Appliances	12/24/80	10/27/82
TT	Metal Coil Surface Coating	1/5/81	11/1/82
UU	Asphalt Processing & Asphalt Roofing Mfg.	5/26/81	8/6/82
VV	Fugitive Emission; Synthetic Organ. Chem.	1/5/81	10/18/83
WW	Beverage Can Surface Coating	11/26/80	8/25/83
XX	Bulk Gasoline Terminals	12/17/80	8/18/83
ZZ	Industrial Boilers		
AAA	Volatile Organic Liquid Storage	7/23/84	
BBB	Rubber Products Ind.; Tire Mfg.	1/20/83	9/15/87
CCC	Non-Fossil Fuel Fire Boilers		
DDD	Volatile Organic Compound Emissions from Polymer Mfg. Industry	9/30/87	
FFF	Flexible Vinyl & Urethane Coating & Printing	1/18/83	6/29/84
GGG	Refinery Fugitive Emissions	1/4/83	5/30/84
HHH	Synthetic Fibers Mfg.	11/23/82	4/5/84
III	Synthetic Organic Chemical Ind. Air Oxide	10/21/83	
JJJ	Petroleum Drycleaners	12/14/82	9/21/84
KKK	On-shore N.G. Process. Plts.; VOC Equip. Leaks	1/20/84	6/24/85
LLL	On-shore N.G. Process.; SO_2 Emissions	1/20/84	10/1/85
NNN	Synthetic Organic Chem. Mfg. Distillation Op.	1/20/84	1/2/86
OOO	Non-metallic Mineral Processing Plts.	8/31/83	8/1/85
PPP	Wool Fiberglass Insulation Mfg. Plts.	2/7/84	2/25/85
QQQ	VOC Emissions from Petroleum Refinery Wastewater Systems	5/4/87	11/23/88
SSS	Magnetic Tape Manufacturing Industry	1/22/86	10/3/88
TTT	Surface Coating of Plastic Parts of Business Machines	1/8/86	1/29/87
UUU	Calciners and Dryers in Mineral Industries	4/23/86	
VVV	Polmeric Coating of Supporting Substrates Facilities	4/30/87	

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September 2, 1997

Mr. David Ullrich
Acting Regional Administrator
United States Environmental Protection Agency - Region V
77 West Jackson Blvd.
Chicago, IL 60604

Subject: Request for Determination
40 CFR 60 Subpart Kb

Dear Mr. Ullrich:

We have been retained by a client to determine the applicability of 40 CFR 60 Subpart Kb to an existing facility located in USEPA's Region V. Therefore, in accordance with 40 CFR 60.5, we are requesting determinations on the following.

1) What is a "modification" under 40 CFR 60 Subpart Kb?

A storage tank whose capacity is at least 40 m^3 was installed at a facility prior to July 23, 1984. The operator would like to change the volatile organic liquid (VOL) stored in the tank to another VOL with a higher maximum true vapor pressure.

- Does this change in the VOL constitute a modification thereby subjecting the tank to the requirements of 40 CFR 60 Subpart Kb?
- What if the new VOL to be stored in the tank has a similar or lower vapor pressure, but because of an increase in throughput, the change will result in increased emissions?
- What if the tank is covered under a state origin permit (i.e., not federally enforceable) that does not specify what VOL is stored and, furthermore, the change will not result in an exceedance of the emission limit established by that permit?

Because there are two definitions of "modification" in the regulations we seek clarification on the applicability and/or relation between the following subparts:

- 40 CFR 60.14(e)(4) states that the use of an alternative fuel or raw material shall not be considered a modification if, "*prior to the date any standard under this subpart becomes applicable to that source type, as provided by § 60.1, the existing facility was designed to accommodate that alternative use.*" This citation further states that a

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facility shall be considered to be designed to accommodate an alternative fuel or raw material if "*that use could be accomplished under the facility's construction specifications as amended prior to the change.*" Typically, a storage tank only needs cleaned prior to storing an alternative VOL and no design changes are required.

- 40 CFR 60.2 defines a modification as "*any physical change in , or change in the method of operation of, an existing facility which increases the amount of any air pollutant (to which a standard applies) emitted into the atmosphere by that facility or which results in the emission of any air pollutant (to which a standard applies) into the atmosphere not previously emitted.*"

2) Is Acetone considered a VOL with respect to 40 CFR Subparts A and Kb?

On June 7, 1995, EPA published a notice in the Federal Register (60 FR 31633) that excludes acetone from the definition of volatile organic compound (VOC). The definition of VOL, as found in 40 CFR 60.111b, is "...any organic liquid which can emit volatile organic compounds into the atmosphere except those VOL's that emit only those compounds which the Administrator has determined do not contribute appreciably to the formation of ozone. These compounds are identified in EPA statements on ozone abatement policy for SIP revisions (42 FR 35314, 44 FR 32042, 45 FR 32424, and 45 FR 48941)." Acetone is not included in any of these citations.

*3) Are blending tanks subject to 40 CFR Subparts A and Kb?

These tanks are essentially of the same design as a storage tank. They use submerged or bottom fill and conservation vents and may or may not be equipped with a mechanical agitator. They are used to blend various chemicals and solvents for customer specified formulations. If a blend tank does not have a mechanical agitator, the material is generally recirculated in order to mix it. The material usually remains in the blend tank for less than 24 hours.

- Does EPA consider blend tanks with a capacity of at least 40 m^3 subject to 40 CFR 60 Subpart Kb?

- Is the presence or absence of a mechanical agitator relevant with respect to 40 CFR 60 Subpart Kb applicability?

4) If a floating roof is added to an existing storage tank does the Agency require that the permittee subtract the volume occupied by the tank's floating roof for purposes of calculating its capacity?

- Specifically, if a storage tank has a usable capacity greater than or equal to 151 m^3 without an internal floating roof, but the usable capacity drops below 151 m^3 after the

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installation of an internal floating roof, which capacity should be considered the design capacity for purposes of 40 CFR 60 Subpart Kb?

We are requesting written clarification on these issues. We would also appreciate receiving copies of or citations to guidance documents, interpretative memoranda and all other reference material which serve as the basis for USEPA's responses. Please respond to the undersigned at the address provided below:

Woodward-Clyde Consultants
8383 Greenway Blvd. Suite 200
Middleton, WI 53562

We appreciate your assistance in clarifying these issues. If you have any questions, please feel free to call me at (608) 836-5040.

Sincerely,

Daniel R. Guido
Project Scientist

DRG:rvg

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

REPLY TO THE ATTENTION OF:

OCT 17 1997

(AE-17J)

Daniel R. Guido, Project Scientist
Woodward-Clyde Consultants
8383 Breenway Boulevard, Suite 200
Middleton, Wisconsin 53562

Dear Mr. Guido:

This is in response to your letter of September 2, 1997, requesting several applicability determinations regarding the Standards of Performance for Volatile Organic Liquid (VOL) Storage Vessels codified under 40 C.F.R. Part 60, Subpart Kb. Specifically you asked the following questions:

•Does a change in VOL or an increase in throughput make an existing storage vessel subject to 40 C.F.R. Part 60, Subpart Kb?

A modification under the New Source Performance Standards (NSPS) is determined by the requirements set forth in 40 C.F.R. § 60.14(e). Under these requirements, switching to a higher vapor pressure VOL will not by itself be considered a modification if the existing storage vessel was designed to accommodate the higher vapor pressure VOL prior to July 23, 1984. That is to say, if the existing storage vessel can store the material without having to undergo any physical changes, the United States Environmental Protection Agency (U.S. EPA) would not view this new use as a modification. Also, based on § 60.14(e), the increase of throughput will not be considered a modification, even if it results in an increase emissions of VOCs, in those cases where the existing storage vessel was originally designed with the capability to handle the increase throughput.

•What if the existing storage vessel is covered by a state permit which does not specify what VOL can be stored and the change will not result in an exceedance of the emission limit established by the permit?

State permits do not provide shielding from the NSPS. Therefore, if an existing source undergoes reconstruction or modification after July 23, 1984, then the storage vessel will become subject to 40 C.F.R. part 60, Subpart Kb.

•Is acetone considered a VOL with respect to 40 C.F.R. Subparts A and Kb.

U.S. EPA, for the reasons outlined in your letter, agrees with your determination that acetone is not a VOL.

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*• Does U.S. EPA consider blending tanks with capacity of at least 40 m^3 subject to 40 C.F.R. - Subpart Kb?

40 C.F.R. § 60.110b does not differentiate storage vessels based on use. A similar question was posed to U.S. EPA during the public comment period for the proposed rule. One commenter (comment enclosed) requested that production vessels having an intermediate function, not raw material or product storage, be exempted from the proposed standards. For the reasons explained in the response to the above comment, the final standards did not provide an exemption based on the use of the storage tank. Therefore, it is U.S. EPA's interpretation that a blending tank of at least 40 m^3 is subject to 40 C.F.R. Part 60, Subaprt Kb.

*• Is the presence or absence of a mechanical agitator relevant with respect to 40 C.F.R. Part 60, Subpart Kb applicability?

Pursuant to 40C.F.R. § 60.110b, applicability is only based on the size of the storage vessels and the vapor pressure of the VOLs. It is U.S. EPA's interpretation that the presence of a mechanical agitator is only relevant when one considers the question of "modification". For example, if a product change requires blending, the installation of a mechanical agitator in the tank constitutes "physical change". Providing that there are emission increases associated with the product storage change, the tank will become subject to 40 C.F.R. Part 60 Subpart Kb because the tank is not considered capable of accommodating the alternative product without the installation of an agitator.

• If a storage tank has a usable capacity greater than or equal to 151 m^3 without an internal floating roof, but the usable capacity drops below 151 m^3 after the installation of an internal floating roof, which capacity should be considered the design capacity for purposes of 40 C.F.R. Part 60 Subpart Kb?

It is U.S. EPA's interpretation that for the purpose of 40 C.F.R. Part 60, Subpart Kb the design capacity of the tank described above, is the design capacity of the tank prior to the installation of the internal floating roof. 40 C.F.R. 60 §§60.110b(a), (b) and (c) identify "design capacity" and not "usable capacity" of the storage vessel to be the key parameter for considering applicability. Even though "design capacity" is not defined under 40 C.F.R. Part 60 Subpart Kb, it is U.S. EPA's interpretation that the "design capacity" is the nominal figure or nominal rating given to the storage vessel by the tank manufacturer. For example, if a brochure stated that a tank has a nominal capacity of 151 m^3, for purposes of "design capacity" the tank would be considered a 151 m^3 tank. Upon modification, if there is an increase in the emission rate of VOCs to the atmosphere, such a tank becomes subject to the control requirements of 40 C.F.R. § 60.112b. The volume occupied by the internal floating roof (needed to comply with 40 C.F.R. § 60.112b) can not be subtracted to bring the tank below the threshold of 40 C.F.R. Part 60, Subpart Kb.

If you have any questions regarding this determination, please call Spiros Bourgikos, of my staff, at (312) 886-6862.

Sincerely yours,

for William L. MacDowell

George Czerniak, Chief
Air Enforcement and Compliance Assurance Branch

Enclosure

K6

VOLATILE ORGANIC LIQUID STORAGE VESSELS
(Including Petroleum Liquid Storage Vessels)

BACKGROUND INFORMATION FOR PROMULGATED STANDARDS OF PERFORMANCE

Emission Standards and Engineering Division

U. S. Environmental Protection Agency
Office of Air and Radiation
Office of Air Quality Planning and Standards
Research Triangle Park, North Carolina 27711

JANUARY 1985

9. Trichlorotrifluoroethane;
10. Dichlorotetrafluoroethane; and
11. Chloropentafluoroethane.

Because these compounds do not significantly contribute to the formation of ozone, the Agency agrees that the control of vessels storing these compounds would not reduce ambient ozone levels and has, therefore, exempted vessels that store only these compounds from the final rule. Because this list of compounds will change from time to time as research continues, no list of exempt compounds is included in the final rule. Rather the approach that has been taken is to exempt each compound that has previously been declared negligibly photochemically reactive in previous Federal Register notices.

Regarding the request that a list of VOL's and/or VOC's be provided as part of the final standard, it should be noted that it is the Agency's position that all organic compounds are photochemically reactive and, therefore, potentially subject to this NSPS, until such time as they are declared negligibly photochemically reactive. In essence, the commenters are requesting that a list of all organic compounds except those determined to be negligibly photchemically reactive be provided as part of the final standards. The Agency sees no reason to add such a list to the final standards and feels that the provisions determining applicability of the NSPS are adequate without it. Therefore, no such list has been incorporated into the final rule.

Comment: One commenter (IV-D-23) requested that production and process vessels having an intermediate function, not raw material or product storage, be exempted from the proposed standards. The commenter said that estimates of working losses for these vessels were incorrectly based on "total throughput." The commenter said that "net throughput" is a more realistic measure of turnovers. The commenter stated that the control technology may not be cost effective for production and process vessels. The commenter recommended that EPA reevaluate the standards using net throughput.

Response: The EPA agrees that total throughput (tank volume divided into annual liquid throughput) may not accurately reflect the actual

change in liquid level (net throughput), which is an underlying mechanism of working losses. The commenter provides an example of a 75 m^3 tank that would undergo 689 turnovers per year as measured by total throughput, but only 87 turnovers per year as measured by net throughput. For the specific tank cited by the commenter, working losses would be 10.5 Mg/yr as calculated with total throughput versus 3.2 Mg/yr as calculated with net throughput.

In evaluating this issue, the EPA first examined the cost effectiveness of controlling the sample tank cited by the commenter. Because the commenter did not fully specify the necessary tank parameters, the emission reduction obtained by BDT controls was evaluated for working losses, based on net throughput, and was assumed to be 90 percent. To be conservative, a welded steel deck with Teflon®, liquid-mounted, primary seals was costed as the control technology. Tank diameter was assumed to be 4.5 m (15 ft) and product value was assumed to be $360/Mg. The calculated cost effectiveness for controlling this tank is about $930/Mg. In the case cited by the commenter, the cost effectiveness of controls is still reasonable even though the use of net throughput reduces estimated working losses to 30 percent of the losses based on total throughput.

In previous studies by the EPA, model plants were developed for storage associated with selected chemical process. Some of these models contain "constant level" tanks (tanks with high total throughputs but low net throughputs). These tanks were evaluated for control, and the results are presented in Table 2-7. The average cost effectiveness was found to be $354/Mg. Although there are instances where the cost-effectiveness value is very high, the average cost effectiveness of controlling constant level tanks is reasonable. These costs are also representative of production and process tanks that are operated typically as constant level tanks. Therefore, the final standards do not provide an exemption for constant level tanks.

Misty

Route copy to Misty, Jim, Mike ~~Parke~~ 12
cc to DO, Lab Services (Mike G.)
NSR STAFF
CO, DO, ALLA

JUL 05 1995

S/C Directors, B C3

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WASHINGTON, D.C. 20460

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OFFICE OF
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COMPLIANCE ASSURANCE

Mr. William Deutschlander
ASTT Corp.
7 Solar Drive
New Providence, PA 17560

Dear Mr. Deutschlander,

This is in response to your letter of April 6, 1995, in which you requested clarification of the New Source Performance Standards, 40 C.F.R. Part 60 Subpart Kb, for a mechanical shoe primary seal. You indicate there are other types of mechanical shoe primary seals currently in use that are not continuous, but overlapping. In addition, you have found vertical shoe heights as short as fifteen (15) inches in newly installed seals.

In order to respond to your question, my staff reviewed: 40 C.F.R., Part 60, Subpart Kb; the Federal Register notices involving Subpart Kb; engineering information regarding overlapping mechanical shoe seals sent to the Environmental Protection Agency (EPA) at Research Triangle Park, North Carolina; the Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels)-Background Information for Promulgated Standards Document; and information from the tests EPA relied upon when it developed this rule.

To answer your first question regarding overlapping mechanical shoe primary seals, 40 CFR 60.112b(a)(1)(ii)(C) states in pertinent part, "A mechanical shoe seal is <u>a</u> metal sheet held vertically against the wall of the storage vessel by springs or weighted levers and <u>is</u> connected by braces to the floating roof." (Emphasis added.) The first emphasized phrase, "a metal sheet", means the mechanical shoe primary seal must consist of a single (one-piece) sheet of metal. The second emphasized word, "is", reinforces the point that the mechanical shoe primary seal is composed of a single metal sheet. Additional support for this reasoning originates from the test results used by EPA, which

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were derived from a mechanical shoe seal that was comprised of a single metal sheet. Since an overlapping mechanical shoe seal system is not a single sheet of metal, but, instead, is comprised of several sheets of metal, it does not meet the requirements of 40 CFR 60.112b(a)(1)(ii)(C).

This determination does not preclude the use of alternative mechanical primary shoe seals. The Agency encourages innovation. There is, however, a formal process of review and evaluation that is described at 40 CFR §60.114a. In brief, the person who desires to establish an alternative means of emission limitation that will achieve, at minimum, the emission reduction required under 40 CFR 60.112a, must file an application with the EPA Administrator containing:

(a) an actual emissions test that uses a full-sized or scale model storage vessel, that accurately collects and measures all VOC emissions from a given control device, and that accurately simulates wind and accounts for other emission variables, such as temperature and barometric pressure; and

(b) an engineering evaluation that the EPA Administrator determines is an accurate method of determining equivalence.

With respect to the vertical shoe height issue, according to 40 CFR §60.113b(b)(4)(i)(A), one end of the mechanical shoe seal must extend into the stored liquid, and the other end must extend a minimum vertical distance of 61 cm (approximately 24 inches) above the stored liquid surface. A mechanical shoe seal that is less than 61 cm in vertical distance above the liquid surface is not in compliance with the New Source Performance Standards, Subpart Kb.

I trust this letter answers your concerns. If you have further questions, please contact Everett Bishop of my staff at 202-564-7032.

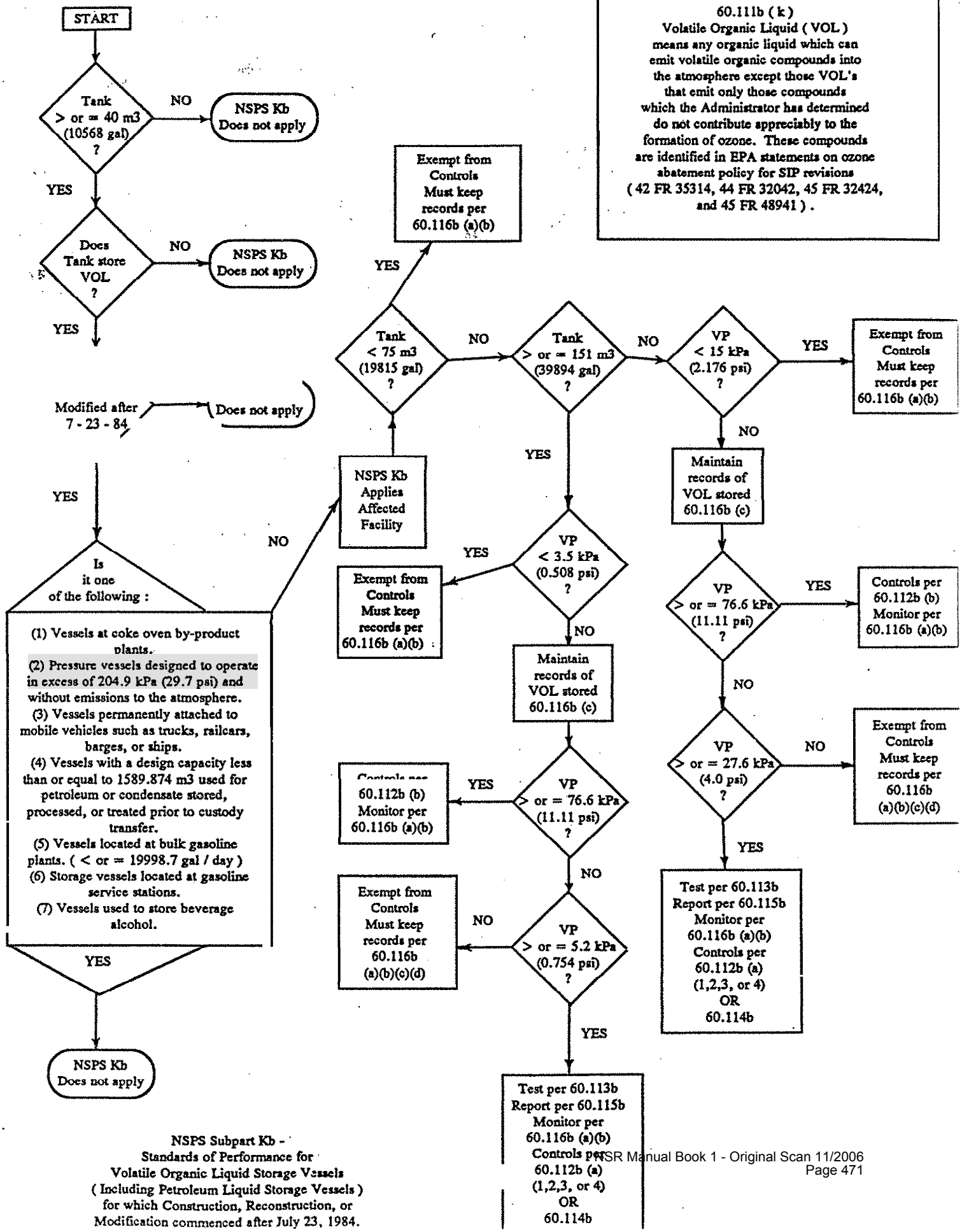
Sincerely,

John B. Rasnic

John B. Rasnic, Director
Manufacturing, Energy and Transportation Division
Office of Compliance

bcc: Leslye M. Fraser, OGC
Kathie Stein, ORE/AED
Bruce Jordan, ESD, OAQPS
Susan Studlien, Acting Director, Air, Pesticides and Toxic Management Division, Region I
Conrad Simon, Director, Air and Waste Management Division, Region II
Elaine B. Wright, Director, Air, Radiation and Toxics Division, Region III
Winston Smith, Director, Air, Pesticides and Toxic Management Division, Region IV
David Kee, Director, Air and Radiation Division, Region V
Samuel J. Coleman, Director, Air, Pesticides and Toxics Division, Region VI
William Spratlin, Director, Air and Toxics Division, Region VII
Patricia Hull, Director, Air and Toxics Division, Region VIII
David Howekemp, Director, Air and Toxics Division, Region IX
Philip G. Millam, Acting Director, Air and Toxics Division, Region X

60.111b (k)
Volatile Organic Liquid (VOL) means any organic liquid which can emit volatile organic compounds into the atmosphere except those VOL's that emit only those compounds which the Administrator has determined do not contribute appreciably to the formation of ozone. These compounds are identified in EPA statements on ozone abatement policy for SIP revisions (42 FR 35314, 44 FR 32042, 45 FR 32424, and 45 FR 48941) .



NSPS Subpart Kb -
Standards of Performance for
Volatile Organic Liquid Storage Vessels
(Including Petroleum Liquid Storage Vessels)
for which Construction, Reconstruction, or
Modification commenced after July 23, 1984.

INTER-OFFICE COMMUNICATION

TO: Harold Strohmeyer, NOVAA **DATE:** 8/24/95

TLH

FROM: Tammy Hilkens, DAPC

SUBJECT: NSPS Subpart GG fuel sampling & testing requirements.

I have checked again with both Region 5 and headquarters regarding your questions on Subpart GG. I tried to summarize each issue and USEPA's response below. If I missed anything, or if you have more questions, please don't hesitate to call.

ISSUE 1: CAN A FACILITY TEST AT ONLY ONE LOAD?

Yes, if a certified NOx continuous emissions monitoring system (CEMS) is installed and certified as a permit requirement. Otherwise, section 60.335(a)(2) requires emission units subject to Subpart GG to test at 4 loads (30, 50, 75, & 100%) to demonstrate compliance with the standard for NOx (Section 60.332.) Texas Eastern Gas Pipeline Company argued that "since the load on the turbine is dictated by natural gas demand, we will not have the flexibility to vary the load." USEPA contends that unless the emission unit is equipped with CEMS for NOx, the entity must demonstrate compliance with section 60.332 by testing at the 4 loads. The demonstration does not just apply to sites with "wet" controls, but to all turbines to determine whether or not the fuel-bound nitrogen of the fuel is greater than the maximum nitrogen content allowed by the NSPS, permit to install and applicable BAT requirements (180 ppm, 32.8lb./hr & 143.7 tons/yr allowable emission limitations) under the various load scenarios. To obtain a waiver for conducting the tests at the 4 loads, USEPA stated that the entity must apply for and obtain the waiver from USEPA <u>prior to</u> construction of the emission unit. They will not entertain a waiver request after its already up and running. USEPA indicated that if Ohio EPA proposed in a permit, language that can be considered legally enforceable (draft PTI) that made it clear what operating restrictions would be necessary to ensure that the emission unit does not operate at loads other than those tested during the performance testing and provide the justification for testing at less than the 4 load points, Region 5 and Headquarters would review the technical support justifying any relaxation from testing at 4 load points and make a determination on a case-by-case basis again, <u>prior to</u> the construction of a site. USEPA would also determine whether or not such site specific waivers require a SIP revision.

Ohio EPA does not have the authority to waive this requirement without the installation and certification of a NOx CEMS.

ISSUE 2: CAN OEPA WAIVE THE FUEL SAMPLING AND ANALYSES REQUIREMENT FOR UNITS UTILIZING PIPELINE QUALITY NATURAL GAS?

No. Section 60.334(a)(2) requires the owner or operator to sample and analyze the sulfur and nitrogen content of the fuel being fired to the turbine on a daily basis. The NSPS does not waive the requirement for emission units utilizing pipeline quality natural gas but does allow Ohio EPA to approve custom schedules once the owner/operator submits enough daily sample results to substantiate the reasonableness of a less frequent sampling requirement. No custom schedules have been approved by USEPA with less than 6 months of daily analyses, in fact the USEPA policy memo regarding waiver requests for pipeline quality natural gas users require a years' worth of operating data to justify going to a once a month sampling frequency. Depending on how often the turbine operates, it could take more than a year to gather enough data to statistically support a request for a custom schedule.

However, Ohio EPA can grant an alternative to the daily sampling requirement for nitrogen if the facility utilizes a NOx CEMS because a continuous measurement is more stringent than a daily sampling requirement. Reports required under section 60.334(c) would be based on the CEMS, rather than the daily sampling and analyses.

Ohio EPA cannot approve an alternative for daily sampling for sulfur based on CEMS because USEPA does not allow SO_2 CEMS to be used on pipeline quality natural gas (too low of a SO_2 ppm to measure acurately.) USEPA would recommend that the owner/operator submit a request to Ohio EPA for approval of a custom schedule. Once enough daily sampling has been conducted, the owner can provide the data to support its request and Ohio EPA can then justify a less frequent sampling basis, but cannot <u>eliminate</u> the fuel sampling, analyses and reporting requirements.

CONCLUSION:

The Texas Eastern Gas Pipeline Company violated the conditions of the PTI (#17-726) by failing to conduct emissions testing, monitoring, recordkeeping and reporting as required by the NSPS Subpart GG, permits to install at the Lewisville, Ohio station. If, as a company, they have not performed the daily nitrogen and sulfur sampling and analyses required by the NSPS, then they are also in violation of the permit to operate emission unit B002 at the Switzer, Ohio facility. The failure to conduct the daily sampling and reporting for the nitrogen and sulfur content has apparently been ongoing for the last several years. I suggest that NOVAA issue a notice of violation and ask for a compliance plan and schedule. NOVAA can then make recommendations to Ohio EPA for any follow-up in an enforcement action request. To avoid this situation in future permits, it may be prudent to spell out the specific NSPS testing, sampling and reporting requirements as part of the special terms and conditions so that the company knows what the requirements are by reading the permit, without having to look it up in the CFR.

cc: Tom Kalman, DAPC
Bruce Weinberg, DAPC
Don Cavote, CDO
Misty Parsons, DAPC
Mike Hopkins, DAPC
Julianne Kurdila, Legal
Ron Hancher, SEDO
Harry Sweitering, HAMCO

cc: J. Brown
R. Branson
A. Lloyd
Air Land/Do Air
Unit Supervisors

Roman → Mike H

AUG 23 1995

S/C Directors

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON D.C. 20460

RECEIVED
JUL 1995
AIR AND RADIATION DIVISION

JUL 19 1995

OFFICE OF
ENFORCEMENT AND
COMPLIANCE ASSURANCE

Nasir Ghani
Environmental Scientist
Tenneco Gas
1010 Milam Street
P.O. Box 2511
Houston, Texas 77252-2511

SUBJECT: Tenneco Gas, Request for Approval of a Custom Fuel Monitoring Plan for Sulfur

Dear Mr. Ghani:

This is in response to your letter of June 2, 1995, requesting approval of a system-wide custom fuel sulfur monitoring plan for your natural gas transmission system. The Tenneco transmission system is a pipe line that transports natural gas from the Texas and Louisiana Gulf Coast to the Northeastern United States. The pipe line operates in six Environmental Protection Agency (EPA) Regions (I, II, III, IV, V, and VI) and within twelve (12) states within these Regions. According to your letter, the natural gas being transported typically has a sulfur content in the order of 0.02 to 0.002 % by weight. Many of the compressor engines located along the pipe line are subject to New Source Performance Standards (NSPS) in 40 CFR 60, Subpart GG. This Subpart requires the owner/operators of gas turbines to monitor the fuel sulfur and nitrogen content on a daily basis and to use an approved ASTM method.

The NSPS for Stationary Gas Turbine allows for custom fuel monitoring plans for sulfur and nitrogen content as an alternative to daily monitoring. In order to minimize the burden and duplication of sampling the fuel sulfur content from turbines burning natural gas along the pipe line, you proposed an alternative monitoring plan that reduces the sampling frequency from daily to semi-annually in five locations. Tenneco has been waived from fuel bound nitrogen monitoring because of the low nitrogen content in pipe line quality natural gas.

We have reviewed a similar proposal with several of the Regions that are effected by the pipe line, and determined that your alternative monitoring plan as proposed is approved under the following condition:

> The custom schedule for monitoring sulfur in the natural gas shall be based on guidelines contained in the August 14, 1987, memo that requires monitoring frequency to be no less stringent than two monthly samples for six months, followed by quarterly sampling, then semiannually. Before semiannual monitoring can be initiated, at least six months of data from twice monthly and quarterly monitoring must demonstrate little variability in sulfur content and compliance with §60.333 for each monitoring event. The sulfur monitoring schedule and guidelines are outlined in the enclosure of the August 14 memo. (Enclosure).

If you have any questions concerning this matter, you can contact Ted Coopwood of my staff at (202) 564-7058.

Sincerely,

John B. Rasnic

John B. Rasnic, Director
Manufacturing, Energy and Transportation Division
Office of Compliance

Enclosure

cc: Mirza P, Baig, Region IV
Jim Hagedorn, Region III
Jonathan E. York (6T-EC)
Zofia Kosim, ORE, AED
Terry Harrison, OAQPS (RTP)
Linda Murphy, Region I
Kenneth Eng, Region II
David Kee, Region V

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

AUG 14 1987

OFFICE OF
AIR AND RADIATION

MEMORANDUM

SUBJECT: Authority for Approval of Custom Fuel Monitoring Schedules Under NSPS Subpart GG

FROM: John B. Rasnic, Chief
Compliance Monitoring Branch

TO: Air Compliance Branch Chiefs
Regions II, III, IV, V, VI and IX

Air Programs Branch Chiefs
Regions I-X

The NSPS for Stationary Gas Turbines (Subpart GG) at 40 CFR 60.334(b)(2) allows for the development of custom fuel monitoring schedules as an alternative to daily monitoring of the sulfur and nitrogen content of fuel fired in the turbines. Regional Offices have been forwarding custom fuel monitoring schedules to the Stationary Source Compliance Division (SSCD) for consideration since it was understood that authority for approval of these schedules was not delegated to the Regions. However, in consultation with the Emission Standards and Engineering Division, it has been determined that the Regional Offices do have the authority to approve Subpart GG custom fuel monitoring schedules. Therefore it is no longer necessary to forward these requests to Headquarters for approval.

Over the past few years, SSCD has issued over twenty custom schedules for sources using pipeline quality natural gas. In order to maintain national consistency, we recommend that any schedules Regional Offices issue for natural gas be no less stringent than the following: sulfur monitoring should

be bimonthly, followed by quarterly, then semiannual, given at least six months of data demonstrating little variability in sulfur content and compliance with §60.333 at each monitoring frequency; nitrogen monitoring can be waived for pipeline quality natural gas, since there is no fuel-bound nitrogen and since the free nitrogen does not contribute appreciably to NO_x emissions. Please see the attached sample custom schedule for details. Given the increasing trend in the use of pipeline quality natural gas, we are investigating the possibility of amending Subpart GG to allow for less frequent sulfur monitoring and a waiver of nitrogen monitoring requirements where natural gas is used.

Where sources using oil request custom fuel monitoring schedules, Regional Offices are encouraged to contact SSCD for consultation on the appropriate fuel monitoring schedule. However, Regions are not required to send the request itself to SSCD for approval.

If you have any questions, please contact Sally M. Farrell at FTS 382-2875.

Attachment

cc: John Crenshaw
George Walsh
Robert Ajax
Earl Salo

Enclosure

Conditions for Custom Fuel Sampling Schedule for Stationary Gas Turbines

1. Monitoring of fuel nitrogen content shall not be required while natural gas is the only fuel fired in the gas turbine.

2. Sulfur Monitoring

   a. Analysis for fuel sulfur content of the natural gas shall be conducted using one of the approved ASTM reference methods for the measurement of sulfur in gaseous fuels, or an approved alternative method. The reference methods are: ASTM D1072-80; ASTM D3031-81; ASTM D3246-81; and ASTM D4084-82 as referenced in 40 CFR 60.335(b)(2).

   b. Effective the date of this custom schedule, sulfur monitoring shall be conducted twice monthly for six months. If this monitoring shows little variability in the fuel sulfur content, and indicates consistent compliance with 40 CFR 60.333, then sulfur monitoring shall be conducted once per quarter for six quarters.

   c. If after the monitoring required in item 2(b) above, or herein, the sulfur content of the fuel shows little variability and, calculated as sulfur dioxide, represents consistent compliance with the sulfur dioxide emission limits specified under 40 CFR 60.333, sample anaylsis shall be conducted twice per annum. This monitoring shall be conducted during the first and third quarters of each calendar year.

   d. Should any sulfur analysis as required in items 2(b) or 2(c) above indicate noncompliance with 40 CFR 60.333, the owner or operator shall notify the State Air Control Board) of such excess emissions and the custom schedule shall be re-examined by the Environmental Protection Agency. Sulfur monitoring shall be conducted weekly during the interim period when this custom schedule is being re-examined.

3. If there is a change in fuel supply, the owner or operator must notify the State of such change for re-examination of this custom schedule. A substantial change in fuel quality shall be considered as a change in fuel supply. Sulfur monitoring shall be conducted weekly during the interim period when this custom schedule is being re-examined.

4. Records of sample analysis and fuel supply pertinent to this custom schedule shall be retained for a period of three years, and be available for inspection by personnel of federal, state, and local air pollution control agencies.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

MAR 17 1998

REPLY TO THE ATTENTION OF:
(AE-17J)

Tracy Mills, Superintendent
City of Canton Water Pollution Control Center
3530 Central Avenue, Southeast
Canton, Ohio 44707

Dear Mr. Mills:

The United States Environmental Protection Agency (U.S. EPA) received your February 27, 1997, request for a waiver from certain reporting requirements in the new source performance standard (NSPS) for sewage sludge incinerators, 40 C.F.R. 60, Subpart O. The U.S. EPA has evaluated this request based upon information provided in letters from you or your consultant. The U.S. EPA has also gathered additional information through telephone conferences with you, the Canton Division of Air Pollution Control, and the Office of Enforcement and Compliance Assurance in the U.S. EPA Headquarters.

Before addressing the waiver request, the U.S. EPA must first address the applicability of the sewage sludge incinerator NSPS to the Canton WPCC's incinerators. In summary, the U.S. EPA has determined that the rehabilitation project did meet the definition of a modification, and the sewage sludge incinerators at the Canton WPCC are now subject to 40 C.F.R. 60, Subpart O. Because the authority to waive or modify reporting requirements under Section 111 of the Clean Air Act, 42 U.S.C. § 7411, has not been delegated to the Region 5 Administrator of the U.S. EPA, we have requested that the appropriate U.S. EPA Headquarters office issue a decision on whether a reporting requirement promulgated under Section 111 can be waived and, if so, on whether to grant or deny the Canton WPCC's request.

Applicability of the Sewage Sludge Incinerator NSPS

Prior to June 1973, the Canton WPCC constructed two multiple hearth sewage sludge incinerators. Each incinerator had the capacity to combust 1600 tons of sewage sludge per day. On June 11, 1973, the U.S. EPA proposed a NSPS for sewage sludge incinerators, and promulgated it on March 8, 1974. This NSPS applies to each incinerator that combusts wastes containing more than 10 percent sewage sludge (dry basis) produced by municipal sewage treatment plants, or each incinerator that charges more

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than 1000 kilograms per day municipal sewage sludge (dry basis). This NSPS applies to any facility constructed or modified after June 11, 1973. Between January 1995 and April 1997, the City of Canton conducted a rehabilitation project at the Canton WPCC which, among other things, increased the production rate capacity to 2100 tons per unit per day. The capital cost for the rehabilitation project was $2,890,084.53.

Pursuant to 40 C.F.R. § 60.14(a) provides that any physical or operational change to an existing facility, except as provided under paragraphs (e) and (f) of § 60.14, which results in an increase in the emission rate to the atmosphere of any pollutant to which a standard applies shall be considered to be a modification within the meaning of Section 111 of the Clean Air Act, 42 U.S.C. § 7411. Further, upon modification, an existing facility shall become an affected facility for each pollutant to which a standard applies and for which there is an increase in the emission rate to the atmosphere. Pursuant to 40 C.F.R. § 60.14(e)(2), an increase in production rate of an existing facility, if that increase can be accomplished without a capital expenditure on that facility, shall not, by itself, be considered a modification. In other words, if the production rate increase results from a capital expenditure, then the production rate increase can by itself be considered to be a modification. Capital expenditure is defined in 40 C.F.R. § 60.2 to mean an expenditure for a physical or operational change to an existing facility which exceeds the product of the applicable "annual asset repair allowance percentage" specified in the latest edition of the Internal Revenue Service Publication 534 and the existing facility's basis (i.e., the cost of the original facility).

The annual asset repair allowance percentage for water utilities is 1.5 percent. During a February 25, 1998, conversation with Charles Hall, of my staff, you reported that the solids handling contract, including the sewage sludge incinerators, for the pre-rehabilitation existing facility was $4,302,292. The product of these two numbers is $64,534.38. Because the production rate increase resulted from a capital expenditure which exceeded the product of the annual asset repair allowance percentage and the existing facility basis, the rehabilitation project is considered to be a modification. Therefore, the U.S. EPA concludes that the rehabilitation project constituted a modification of the existing facility, and the sewage sludge incinerators at the Canton WPCC are subject to NSPS, Subpart O.

Waiver Request
The Region 5 office of the U.S. EPA has requested the assistance of the Office of Enforcement and Compliance Assistance (OECA) to determine whether a reporting requirement promulgated under Section 111 can be waived and, if so, whether to grant or deny the Canton WPCC's request. This office will forward OECA's decision to you.

If you have any questions regarding the applicability determination, please call Charles Hall, of my staff, at (312) 353-3443.

Sincerely yours,

David Kee, Director
Air and Radiation Division

CANTON CITY HEALTH DEPARTMENT
DIVISION OF AIR POLLUTION CONTROL
420 MARKET AVENUE NORTH
CANTON, OHIO 44702
PHONE: (330) 489 - 3385
FAX: (330) 489 - 3335

FACSIMILE TRANSMITTAL

DATE: May 12, 1998

FOR THE ATTENTION OF: Misty Parsons

FIRM: Ohio EPA, DAPC, AQM&P

FAX NUMBER: 614 - 644 - 3681

REGARDING: Water Pollution Control Center

FROM: Jim Braun

This transmission consists of 4 pages including this page.

Please notify us at (330) 489 - 3385 if you do not receive all the pages.

COMMENTS:

Ohio EPA
Division of Air Pollution Control

inter-office communication

to:	(See distribution list.)
from:	Tim Fischer through Tom Kalman and Jim Orlemann, Manager, Engineering Section
subject:	Guidance regarding aggregate processing plants
date:	July 9, 1999

The purpose of this IOC is to give guidance regarding emission calculations for storage piles and the permitting of aggregate processing plants in response to a request made during a permitting conference call on January 21, 1999. This guidance is being sent to each Ohio EPA DO/LAA that handles permitting issues because there is applicability on a State-wide basis.

It was asked that portable crushing and screening processes receive individual facility IDs (premise numbers) in order to aid in tracking these units during relocation from site to site, and conveyors be permitted under a common emission unit ID covering material handling but individually identified with inventory control numbers (these could be numbers used by the company to identify units for tracking purposes.

It is Ohio EPA's policy that portable plants should have permits prepared by the Ohio EPA DO/LAA where the home office is located. If the office is out of State, the Ohio EPA DO/LAA where the first operation begins pursuant to a PTI should prepare the permit. Each of these permits should identify all equipment (by company ID) covered by it. Alternatively, each Ohio EPA DO/LAA could assign its own ID codes for each piece of equipment (i.e., each conveyor, crusher, screen, etc.) if the company does not provide an adequate ID system.

If a company wishes to relocate a piece of equipment from one processing line to another processing line at a different site, a Notice of Intent To Relocate form should be submitted to the office where the current permits are filed (see Engineering Guide #44). A new Permit to Install ("PTI") would not be necessary as long as the source meets all the requirements of Ohio Administrative Code ("OAC") Rule 3745-31-03(A)(1)(p) concerning portable sources. In this case, the source and its ID would be added to the permit which covers the other sources in the current processing line. Likewise, it would be removed from the permit covering the sources in the former processing line. The Ohio EPA DO/LAA would have to determine any effect the relocation would have with respect to NSPS Subpart OOO or PTI rules. Any approach using individual facility ID (premise number) or individual emission unit ID numbers for each piece of equipment would make permitting too cumbersome and costly for Ohio EPA and the regulated community.

The purpose of the following section is to provide guidance regarding the calculation of emissions from storage piles. This should help to ensure consistency on a state-wide basis.

The following are examples which may be used as guides in calculating storage pile emissions. These examples are provided in response to a request made during the previously-mentioned conference call. The method used for calculating emissions due to wind erosion, as with all other storage pile emissions, should be taken from the most recent supplement to Compilation of Air Pollutant Emission Factors, AP-42 document ("AP-42"). However, it is understood that the AP-42 method for wind erosion potential is extremely cumbersome. Therefore, an alternate method is also given for use if lack of data or time constraints are a problem.

Calculation of tsp emissions from load-in for agricultural limestone storage piles.

Method used is from AP-42, section 13.2.4 "Aggregate Handling and Storage Piles." (1/95 ed.)

$$E = k(0.0032) \frac{\frac{U}{5}^{1.3}}{\frac{M}{2}^{1.4}} \quad \text{(pound [lb]/ton)}$$

where:

E = emission factor,
k = particle size multiplier (dimensionless),
U = mean wind speed (mph), and
M = material moisture content (%).

For this example:

k = 0.74 (assumed < 30 μm, from 13.2.4-3),
U = 8.7 mph (Columbus, OH from storage pile permit app.), and
M = 2.1 % (from Table 13.2.4-1).

$$E = 0.74(.0032) \frac{\frac{8.7}{5}^{1.3}}{\frac{2.1}{2}^{1.4}} = 0.0045 \text{ lb tsp/ton}$$

This emission factor is used along with production data to determine hourly, daily, or annual emissions. For example, if a plant produces 1000 TPH on a 8/5/50 (hours/days/weeks) schedule, the tsp emissions would be calculated as:

hourly = 1000 TPH * 0.0045 = 4.5 lbs/hr
daily = 4.5 lbs/hr * 8 hrs. = 36 lbs/day
annually = 36 lbs/day * 250 days/year = 4.5 TPY

Calculation of tsp emissions from wind erosion for agricultural limestone storage piles.

Method used is from AP-42, section 13.2.5 Industrial Wind Erosion. (1/95 ed.)

1. Determine threshold friction velocities for the material.

Threshold friction velocity of a material is the velocity that wind must achieve in order to cause a particle of the material to become airborne. The threshold friction velocity for a given material should be obtained through a field sieve test. The field test is used to determine the mode in the aggregate size distribution as explained in AP-42, page 13.2.5-4. (All references to AP-42 are to the 5th Edition.) From this, the threshold friction velocity can be determined from Table 13.2.5-1. In the absence of field data, Table 13.2.5-2 should be used per conversations with USEPA Region V.

Although this latter table lists materials related to the coal industry only, most aggregate materials are very similar to those in the table. For example, assume crushed limestone to be very similar to scoria (roadbed material) and use the correlating velocity. For this example, the threshold friction velocity for fine coal dust should be used in place of agricultural lime. The fact that it indicates that the dust is on a concrete pad can be ignored as this factor can be used for storage piles also, per Mary Ann Grelinger of Midwest Research Institute ("MRI").

2. Divide the exposed area into subareas of constant frequency of disturbance.

For this example assume the entire pile is disturbed daily, corresponding to a value of N = 365 (the aggregate is normally dropped onto the pile inhibiting most or all of the surface from forming a natural crust; thus, it is disturbed daily). Because of this, every day of the month will be examined when determining monthly erosion potentials. By comparison if the pile is disturbed every three days, then each month would be separated into three-day periods in which the highest wind values for each period would be examined.

3. Tabulate fastest mile values for each frequency of disturbance and correct them to an anemometer height of 10 m. Then convert fastest mile values to equivalent friction velocities, taking into account the nonuniform wind exposure of elevated surfaces.

Fastest mile values are no longer readily available. However, two-minute wind velocities can be used in their place because the average difference between the two is insignificant (per USEPA, Mary Ann Grelinger of MRI, and Bill Spires of this office). The attached Local Climatic Data ("LCD") table is an example of this data. Bill Spires can provide copies of the two-minute wind velocities for a given time period and location. Calculations are shown in the following table (column descriptions follow):

Table 1: Calculation of Friction Velocities

	2 minute value	2 minute value	2 minute value	U* = 0.1*(Us/Ur)*(2 min. value)		
Day	in mph (7m)	in mph (10m)	in m/s (10m)	Us/Ur=0.2	0.6	0.9
1	29	30	13.4	0.27	0.80	1.21
2	23	24	10.6	0.21	0.64	0.96
3	25	26	11.6	0.23	0.69	1.04
4	14	15	6.5	0.13	0.39	0.58
5	20	21	9.2	0.18	0.55	0.83
6	18	19	8.3	0.17	0.50	0.75
7	13	14	6.0	0.12	0.36	0.54
8	18	19	8.3	0.17	0.50	0.75
9	25	26	11.6	0.23	0.69	1.04
10	29	30	13.4	0.27	0.80	1.21
11	14	15	6.5	0.13	0.39	0.58
12	15	16	6.9	0.14	0.42	0.62
13	25	26	11.6	0.23	0.69	1.04
14	16	17	7.4	0.15	0.44	0.67
15	14	15	6.5	0.13	0.39	0.58
16	15	16	6.9	0.14	0.42	0.62
17	15	16	6.9	0.14	0.42	0.62
18	16	17	7.4	0.15	0.44	0.67
19	13	14	6.0	0.12	0.36	0.54
20	14	15	6.5	0.13	0.39	0.58
21	16	17	7.4	0.15	0.44	0.67
22	14	15	6.5	0.13	0.39	0.58
23	18	19	8.3	0.17	0.50	0.75
24	15	16	6.9	0.14	0.42	0.62
25	16	17	7.4	0.15	0.44	0.67
26	11	12	5.1	0.10	0.30	0.46
27	13	14	6.0	0.12	0.36	0.54
28	8	8	3.7	0.07	0.22	0.33
29	23	24	10.6	0.21	0.64	0.96
30	17	18	7.9	0.16	0.47	0.71
31	10	11	4.6	0.09	0.28	0.42

First and second columns: The first and second column data was obtained from the attached Local Climatological Data for Akron-Canton Airport.

Third column: Anemometer heights and meteorological assignments are listed in Engineering Guide #69. Because the two-minute velocity data was obtained from an anemometer that is 7 m above the ground, the following equation was used to convert to 10 m above the ground in the third column. (A conversion is necessary because the wind velocity changes as the height of the wind changes.)

$$U(10) = U(7)*[\ln(10/0.005)/\ln(N/0.005)]$$

where N = 7,

U = two-minute wind velocity (The roughness height is assumed to be 0.005 m.)

Fourth column: Conversion of two-minute wind velocities from mph to m/s.

Fifth, sixth, and seventh columns: Calculations of friction velocities at each standard Us/Ur[1] ratio using:

$$U^* = 0.1*(Us/Ur)*(\text{two-minute wind velocity})$$

[1](Us/Ur = ratio of surface wind speed to approach wind speed. Us/Ur ratios are specific to particular pile types and are listed in AP-42, section 13.2.5)

4. Calculate the erosion potential for each period between disturbance, treating each area of same Us/Ur ratio as a separate source. Multiply the resulting emission factor by the size of each area and add the emissions that each area contributes.

The characteristics of the storage pile in this example are assumed to be similar to those of Pile A in AP-42, page 13.2.5-6. Table 13.2.5-3 provides percentages of pile surface area correlating to each Us/Ur ratio. The threshold friction velocity for agricultural limestone is 0.54 m/s from Table 13.2.5-2. Because the friction velocity calculated for Us/Ur = 0.2 never reaches 0.54, there will be no potential for erosion from this portion of the surface area. The calculations for erosion potential for the other portions of the surface area of the pile are provided in the following tables (column descriptions follow):

Table 2. Calculation of erosion potential for Us/Ur = 0.6 for the month of January

Day	U* (m/s)	U_t	U^*-U_t	P (g/m^2)	Area (m^2)	Erosion Pot. in g (k*P*A)
1	0.8	0.54	0.26	10.42	389.3	4056.51
2	0.64	0.54	0.1	3.08	389.3	1199.04
3	0.69	0.54	0.15	5.06	389.3	1969.86
5	0.55	0.54	0.01	0.26	389.3	101.22
9	0.69	0.54	0.15	5.06	389.3	1969.86
10	0.8	0.54	0.26	10.42	389.3	4056.51
12	0.69	0.54	0.15	5.06	389.3	1969.86
29	0.64	0.54	0.1	3.08	389.3	1199.04

Total for Us/Ur = 0.6 in January = 16,521.90 g

Table 3. Calculation of erosion potential for Us/Ur = 0.9 for the month of January

Day	U*(m/s)	U_t	U^*-U_t	P (g/m^2)	Area (m^2)	Erosion Pot. in g (k*P*A)
1	1.21	0.54	0.67	42.79	97.3	4163.46
2	0.96	0.54	0.42	20.73	97.3	2017.02
3	1.04	0.54	0.5	27.0	97.3	2627.10
4	0.58	0.54	0.04	1.09	97.3	106.06
5	0.83	0.54	0.29	12.13	97.3	1180.24
6	0.75	0.54	0.21	7.81	97.3	759.92
8	0.75	0.54	0.21	7.81	97.3	759.92
9	1.04	0.54	0.5	27.0	97.3	2627.10
10	1.21	0.54	0.67	42.79	97.3	4163.46
11	0.58	0.54	0.04	1.09	97.3	106.06
12	0.62	0.54	0.08	2.37	97.3	230.60
13	1.04	0.54	0.5	27.0	97.3	2627.10
14	0.67	0.54	0.13	4.23	97.3	411.58
15	0.58	0.54	0.04	1.09	97.3	106.06
16	0.62	0.54	0.08	2.37	97.3	230.60
17	0.62	0.54	0.08	2.37	97.3	230.60
18	0.67	0.54	0.13	4.23	97.3	411.58
20	0.58	0.54	0.04	1.09	97.3	106.06
21	0.67	0.54	0.13	4.23	97.3	411.58
22	0.58	0.54	0.04	1.09	97.3	106.06
23	0.75	0.54	0.21	7.81	97.3	759.92
24	0.62	0.54	0.08	2.37	97.3	230.60
25	0.67	0.54	0.13	4.23	97.3	411.58
29	0.96	0.54	0.42	20.73	97.3	2017.02
30	0.71	0.54	0.17	5.93	97.3	576.98

Total for Us/Ur = 0.9 for January = 27,378.26 g

The total erosion potential for January is the sum of Tables 2 and 3 (16,521.90 g and 27,378.26 g, respectively). This is 43,900.16 g or 96.70 lbs.

First column: Days in January with a potential for wind erosion in corresponding Us/Ur area.

Second column: Friction velocity calculated in Table 1.

Third column: Threshold friction velocity from Table 13.2.5-2 in AP-42.

Fourth column: Friction velocity minus threshold friction velocity.

Fifth column: P (erosion potential) = $58(U^*-U_t)^2 + 25(U^*-U_t)$

Sixth column: Surface area corresponding to Us/Ur.

Total surface area = $\pi*r*(Sqrt(r^2+h^2)) = 811\ m^2$
[where h = 7.6 m (25 ft), r = 15.2 m (50 ft)]

The surface area for Us/Ur = 0.9 is 12 % of the total surface area, while the surface area for Us/Ur = 0.6 is 48 % of the total surface area (Table 13.2.5-3)

Seventh column: Calculation of the erosion potential for the given area = k*P*A, where k (particle size multiplier) = 1.0 for 30 μm from AP-42, page 13.2.5-3.

The above process is then repeated for the remaining eleven months of the year. The erosion potential for all twelve months is summed to obtain the annual emissions. For example:

January - 96.70 lb.	February - 115.04 lb.
March - 100.04 lb.	April -100.04 lb.
May - 116.70 lb.	June - 170.06 lb.
July - 71.70 lb.	August - 86.70 lb.
September - 76.70 lb.	October - 110.04 lb.
November - 91.70 lb.	December - 93.36 lb.

This yields a total of 1,228.78 lbs tsp/year for the subject pile.

Alternate calculation of tsp emissions from wind erosion potential for agricultural limestone storage piles.

Method used is from USEPA's Control of Open Fugitive Dust Sources September 1988. (RACM document should not be used as a reference for this type of calculation since methods or equations contained in it may be out of date.)

$$E = 1.7*(s/1.5)*[(365-p)/235]*(f/15)\ \ (lb/day/acre)$$

where:

E = total suspended particulate emission factor,

s = silt content of the stored material, weight percent (see Table 4-1 of Control of Open Fugitive Dust Sources),

p = number of days with > 0.01 inches of precipitation per year (see Figure 3-1 of Control of Open Fugitive Dust Sources), and

f = percentage of time wind speed exceeds 12 mph (This information is most appropriately obtained from on-site monitoring. However, it can be obtained from the National Weather Service in Asheville, North Carolina. If these options are not possible or practical, a standard value of 30% may be assumed).

For this example:

s = 3.9%, p = 140 days, and f = 30% (assumed).

E = 1.7*(3.9/1.5)*[(365-140)/235]*(30/15) =

8.5 lbs tsp/day/acre

The surface area is 811 m^2 = 8,730 ft^2 = 0.2 acre. Thus, 8.5 lbs/acre/day * 0.2 acre = 1.7 lbs tsp/day. This is 620.5 lbs tsp annually.

Mineral Extraction

Emission factors for the various types of sources involved in mineral extraction can be found in the following documents:

Overburden removal	AP-42 section 13.2.3 (1/95 ed.)
Drilling (wet)	AP-42 section 11.19.2 (1/95 ed.)
Truck loading	AP-42 section 11.19.2 (1/95 ed.)
Haul roads (unpaved roadways)	AP-42 section 13.2.2 (9/98 supplement to 1/95 ed.)
Truck dumping	AP-42 section 11.19.2 (1/95 ed.)
Crushing	AP-42 section 11.19.2 (1/95 ed.)
Transfer and conveying	AP-42 section 11.19.2 (1/95 ed.)
Storage piles	(Refer to the above portions of this IOC.)

Waste disposal	Operations involved include many of the above (i.e, truck loading and dumping). Therefore, the same emission factors can be used.
Reclamation	AP-42 section 13.2.3 (1/95 ed.)

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JANUARY 1998
LOCAL CLIMATOLOGICAL DATA
NOAA, National Climatic Data Center

AKRON, OH

AKRON–CANTON AIRPORT (CAK)

Lat: 40°55' N Long: 81°26' W Elev (Ground): 1208 Feet

Time Zone: EASTERN WBAN: 14895 ISSN #:0198–3881

DATE	TEMPERATURE °F MAXIMUM	MINIMUM	AVERAGE	DEP FROM NORMAL	AVERAGE DEW PT	AVERAGE WET BULB	DEG DAYS BASE 65° HEATING	COOLING	WEATHER	SNOW/ICE ON GND(IN) 0700 LST DEPTH	1300 LST WATER EQUIV	PRECIPITATION (INCHES) 2400 LST SNOW–FALL	2400 LST WATER EQUIV	PRESSURE (INCHES OF HG) AVERAGE STATION	AVERAGE SEA LEVEL	WIND SPEED = MPH DIR = TENS OF DEGREES RESULTANT SPEED	RES DIR	AVERAGE SPEED	MAXIMUM 5–SEC SPEED	DIR	MAXIMUM 2–MIN SPEED	DIR	DATE
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
01	34	7*	21	-5	14	21	44	0	SN	1		T	T	28.90	30.29	16.1	21	16.2	36	23	29	21	01
02	48	31	40	14	26	35	25	0	RA	0		0.0	T	28.87	30.23	15.0	21	15.3	29	22	23	21	02
03	54	43	49	23	38	44	16	0	RA	0		0.0	0.01	28.84	30.18	16.2	21	16.3	36*	22	25	23	03
04	56	44	50	24	47	49	15	0	RA BR	0		0.0	0.42	28.92	30.25	7.8	19	8.2	17	22	14	22	04
05	61*	44	53	27	47	50	12	0	RA BR	0		0.0	0.07	28.82	30.15	10.6	18	10.8	23	18	20	18	05
06	57	53	55*	29	54	54	10	0	RA BR	0		0.0	0.02	28.72	30.03	4.2	20	7.7	22	21	18	20	06
07	59	45	52	27	55	55	13	0	RA FG+ BR	0		0.0	1.04	28.49	29.79	4.3	12	6.9	15	03	13	03	07
08	48	37	43	18	42	42	22	0	TS TSRA RA FG+ BR	0		0.0	0.50	28.20	29.51	4.1	04	5.4	21	01	18	02	08
09	48	33	41	16	35	37	24	0	TSRA RA SN BR	0		T	0.76	28.37	29.69	12.5	24	13.5	31	25	25	25	09
10	39	27	33	8	24	30	32	0	RA SN BR	0		0.1	0.01	28.73	30.08	14.7	24	15.1	33	26	29*	23	10
11	34	20	27	2	13	22	38	0		0		0.0	0.00	28.84	30.20	6.0	27	7.3	16	27	14	26	11
12	44	19	32	7	26	31	33	0	RA	0		0.0	T	28.75	30.11	7.8	15	9.4	18	18	15	19	12
13	47	16	32	7	21	25	33	0	RA SN BR	1		1.2	0.16	28.85	30.21	11.4	28	13.0	29	28	25	28	13
14	26	10	18*	-7	12	18	47	0		1		0.0	0.00	28.97	30.36	6.1	10	7.3	20	08	16	08	14
15	36	26	31	6	30	32	34	0	RA DZ FZRA FG+ BR	0		0.0	0.04	28.56	29.91	1.7	19	7.4	16	18	14	17	15
16	31	27	29	4	27	28	36	0	FZDZ BR	0		0.0	T	28.50	29.85	8.2	36	8.6	18	01	15	01	16
17	31	28	30	6	28	29	35	0	RA FZRA FZDZ SN BR	0		0.4	0.05	28.52	29.87	3.5	24	6.2	18	28	15	27	17
18	29	17	23	-1	23	25	42	0	RA FZDZ SN BR	0		1.1	0.09	28.66	30.02	7.6	26	8.6	18	29	16	23	18
19	31	13	22	-2	20	22	43	0	SN BR	1		0.3	0.01	28.67	30.04	5.2	27	5.8	15	27	13	27	19
20	31	18	25	1	22	24	40	0	SN BR	2		1.0	0.10	28.80	30.17	4.7	29	6.4	16	29	14	28	20
21	28	15	22	-2	18	22	43	0	SN	1		T	T	28.88	30.25	7.4	10	7.6	17	06	16	08	21
22	34	25	30	6	28	30	35	0	RA FZRA SN BR	1		0.1	0.15	28.78	30.14	7.8	09	8.0	17	09	14	09	22
23	42	30	36	12	34	34	29	0	RA DZ BR	0		0.0	0.25	28.59	29.93	3.7	20	10.7	22	14	18	27	23
24	31	28	30	6	27	28	35	0	FZDZ SN BR	T		T	T	28.62	29.98	6.4	30	7.1	17	28	15	30	24
25	30	22	26	2	23	26	39	0	SN BR	0		T	T	28.81	30.17	5.2	26	7.0	17	23	16	30	25
26	38	26	32	8	27	30	33	0	SN	0		T	T	28.90	30.26	4.6	15	6.8	13	16	11	18	26
27	45	28	37	13	29	33	28	0		0		0.0	0.00	28.77	30.13	6.3	12	7.2	14	16	13	17	27
28	45	25	35	11	31	33	30	0	BR	0		0.0	0.00	28.61	29.96	0.6	04	4.2	9	28	8	29	28
29	41	30	36	11	34	35	29	0	RA FZDZ SN BR	0		0.1	0.04	28.44	29.78	8.1	22	11.5	30	26	23	27	29
30	32	30	31	6	28	30	34	0	RA FZRA FZDZ SN BR	0		0.1	0.01	28.61	29.95	10.1	30	10.2	22	30	17	31	30
31	34	24	29	4	25	28	36	0	SN	0		T	T	28.77	30.13	2.6	23	5.0	13	22	10	27	31
	40.1	27.1	33.6		29.3	32.3	31.1	0.0	< MONTHLY AVERAGES TOTALS–>			4.4	3.73	28.70	30.05	3.8	22	9.[illegible]			MONTHLY AVERAGES		
	7.5	10.2	8.8		<–––––––– DEPARTURE FROM NORMAL ––––––––>								1.57	SUNSHINE, CLOUD, & VISIBILITY TABLES ON PAGE 3									

JANUARY 1998
AKRON, OH

DEGREE DAYS

	MONTHLY TOTAL	MONTHLY DEPARTURE	SEASON TO DATE TOTAL	SEASON TO DATE DEPARTURE
HEATING:	965	-281	3438	-76
COOLING:	0	0	0	0

GREATEST 24–HR PRECIPITATION: 1.53 DATE: 07–08
GREATEST 24–HR SNOWFALL: 1.2 DATE: 13
GREATEST SNOW DEPTH: 2 DATE: 20

	SEA LEVEL PRESSURE	DATE	TIME
MAXIMUM	30.52	14	0957
MINIMUM	29.46	09	0535

NUMBER OF DAYS WITH →

MAXIMUM TEMP ≥ 90: 0
MAXIMUM TEMP ≤ 32: 10
THUNDERSTORMS: 2
MINIMUM TEMP ≤ 32: 24
MINIMUM TEMP ≤ 0: 0
HEAVY FOG: 3
PRECIPITATION ≥ 0.01 INCH: 18
PRECIPITATION ≥ 0.10 INCH: 8
SNOWFALL ≥ 1.0 INCH: 3

NSR Manual Book 1 - Original Scan 1/2006 Page 493

S/L Directors, Tim O. Mytee

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OCT 23 1997

OFFICE OF
ENFORCEMENT AND
COMPLIANCE ASSURANCE

MEMORANDUM

SUBJECT: Applicability of NSPS OOO to Affected Facilities in the Nonmetallic Mineral Processing Industry

FROM: John B. Rasnic, Director
Manufacturing, Energy, and Transportation Division
Office of Compliance

TO: Addressees

The purpose of this memorandum is to clarify several New Source Performance Standards (NSPS), Standards of Performance for Nonmetallic Mineral Processing Plants, Subpart OOO applicability issues raised by the National Stone Association (NSA) . The following are responses to the 13 issues for which NSA requested clarification.

1. *Are grizzlies classified as screens and therefore subject to NSPS OOO?*

Section 60.672 (d) states that "[t]ruck dumping of nonmetallic minerals into any screening operation, feed hopper, or crusher is exempt from the requirements of this section." Therefore, grizzlies which serve as screening operations for truck dumping facilities are exempt from the standard. Grizzlies which are not associated with truck dumping are subject to the rule.

2. *If an aggregate plant does not have a crusher, (i.e., is a screening facility only) is it subject to Subpart OOO?*

Subpart OOO does not apply to stand-alone screening operations at plants without crushers or grinders.

3. *At what point does a plant begin?*

There has been conflicting guidance regarding this issue, and the Agency is currently planning a Federal Register notice clarifying the subject. Section 60.670 (a) lists the affected facilities in fixed or portable nonmetallic mineral processing plants. This list includes each crusher, grinding mill, screening operation, bucket elevator, belt conveyor, bagging operation, storage bin, and enclosed truck or railcar loading station. The clear intent of the regulation is that

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all of the facilities listed in § 60.670 (a) are subject to Subpart OOO. In a 1991 Regulatory and Inspection Manual for Nonmetalic Mineral Processing Plants, it was stated that "Subpart OOO facilities begin at the first crushing or grinding operation at the plant." This statement is incorrect. While Subpart OOO affected operations typically have crushers or grinding mills located at or near the beginning of the nonmetallic mineral processing line, this is not always the case (e.g., some plants may convey, screen or otherwise process materials without first utilizing a crusher located in the plant). As long as crushing or grinding occurs anywhere at a non-metallic mineral processing plant, *any* facility listed in § 60.670 (a) is subject to Subpart OOO regardless of its location within the plant. EPA expects that plants that have not considered faciities prior to the first crushing or grinding operation as affected facilities, will now ensure that those affected facilities will meet all of the applicable regulatory requirements. In light of the conflicting guidance that has existed regarding this issue, EPA will enforce this interpretation prospectively.

4. *Are recycled asphalt pavement plants subject to Subpart OOO? Concrete? Glass? Brick?*

Plants which recycle material such as asphalt concrete, concrete or brick are subject to Subpart OOO if they are using affected facilities listed in § 60.670 (a) to crush or grind any nonmetallic mineral. Glass is not considered a nonmetallic mineral, and therefore its recycling would not be subject.

5. *Are feed hoppers, hoppers under screens, or surge bins located over crushers considered to be "storage bins" and subject to the rule? At what point do you read the bin, at the discharge or at the loading point?*

only if used to store material are they subject.

Feed hoppers and hoppers under screens are typically used to collect and convey material to the next process. When these units are used in this fashion, they would not be considered storage bins. However, if these units are used to temporarily store material, they would be considered "storage bins" as defined in § 60.671. Where applicable, Method 9 readings should be conducted at both discharge and loading points.

6. *Once a piece of equipment is classified as exempt under the "like-for-like" provisions, is that equipment always exempt wherever it is moved? What about portable plants?*

If an existing facility is simply relocated it does not become subject to the regulation. However, if during the relocation the facility undergoes a physical or operational change that results in an emissions increase, the facility would be modified and become subject to the rule. If an existing portable plant undergoes a "modification" as defined in 40 CFR § 60.2, it would become an affected facility.

7. *Are open truck/rail car loading facilities subject to the rule?*

Subpart OOO does not apply to open truck or railcar loading facilities.

8. *When grading a visible emissions (VE) test, should a consecutive 6 minute average, or a rolling average, be used?*

A consecutive 6 minute average should be used.

9. *Can a regulatory agency (Regional, state, or local) be given the authority to waive test requirements of affected facilities that do not produce any visible emissions due to the saturated nature of the material being mined?*

§ 60.8 allows for performance tests to be waived if the owner or operator can demonstrate by other means that the affected facility is in compliance with the standard. The EPA Regional offices have been delegated the authority to waive performance tests. In addition, some Regions have delegated this authority to State agencies. The issue regarding the mining of saturated materials has been addressed in the revision to Subpart OOO.

10. *Are cyclones, log washers, classifiers, sand screws, cement silos, and chutes considered to be affected facilities under the rule?*

Cyclones, log washers, classifiers, sand screws, cement silos and chutes are <u>not</u> considered affected facilities.

11. *Are transfer points from crushers and screens to belt conveyors considered to be transfer points that require testing, or are belt-to-belt transfer points the only points required to be tested?*

Transfer points from crushers and screens to belt conveyors and belt-to-belt transfer points require testing. Transfer points from a belt to a stockpile are not subject to Subpart OOO.

12. *Is changing a wet screen to a dry screen considered a modification? Dry screen to a wet screen?*

Changing from a wet screen to a dry screen, or a dry screen to a wet screen, would be considered a physical or operational change. If the change resulted in an increase in emissions, it would be considered a "modification" as defined in § 60.2.

13. *In regards to a hot mix asphalt plant connected to an aggregate plant, at which point does the applicability to Subpart OOO end and Subpart I begin? What about a concrete plant or cement plant connected to an aggregate plant?*

Applicability for Subpart OOO at an aggregate plant would end at the first affected storage silo or bin at a hot mix asphalt facility, where 40 CFR Part 60, Subpart I would then apply. The same answer applies to cement plants subject to 40 CFR Part 60, Subpart F.

If you have any questions regarding these issues, please contact Scott Throwe of my staff at (202) 564-7013.

Addressees:

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Misty

INTER OFFICE COMMUNICATION

DATE: October 5, 1995

TO: District Offices and Local Air Agencies

FROM: Alan Lloyd through Mike Hopkins - Manager, Air Quality Modeling and Planning Section

SUBJECT: Applicability Determination Pertaining to 40 CFR Part 60, Subpart OOO (Standards of Performance for Nonmetallic Mineral Processing Plants)

Recently, a facility proposed to install a 400 ton/hour portable sand and gravel washing and screening plant.

A draft permit was issued by the Agency for the above mentioned plant based on the contents of the application and the applicability requirements listed in 40 CFR Part 60.670 which indicated that the plant was subject to 40 CFR Part 60, Subpart OOO (Standards of Performance for Nonmetallic Mineral Processing Plants). After reviewing the contents of the draft permit, the applicant submitted documentation which indicated that the plant was not subject to 40 CFR Part 60, Subpart OOO.

Background

The Agency, after reviewing the air permit application, determined that the **screening operation** associated with the 400 ton/hour portable sand and gravel washing and screening plant was subject to 40 CFR Part 60, Subpart OOO based upon the language in the applicability section of 40 CFR Part 60.670(a). This section states that except as provided in paragraphs (b), (c) and (d) of this section, the provisions of this subpart are applicable to the following affected facilities in fixed or portable non-metallic mineral processing plants: each crusher, grinding mill, **screening operation**, bucket elevator, belt conveyor, bagging operation storage bin, enclosed truck or railcar loading station.

Since the application indicated that the 400 ton/hour portable sand and gravel plant would be conducting **screening operations** as defined in 60.671 and the plant met the other applicable requirements listed in 40 CFR Part 60, Subpart OOO, the Agency

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issued a draft permit based upon past procedures which required the Agency to issue draft permits for air contaminant sources that are subject to federal regulations, i.e, in this case, Standards of Performance for Nonmetallic Mineral Processing Plants.

Since the time that the agency issued the draft permit, the applicant submitted the following re-typed determinations (the original determinations were faxed a number of times and therefore unlegible, so they are re-typed so that you can read the contents of the determinations) from USEPA (we have also verbally confirmed the validity of the concepts contained in these determinations with Region V) stating that if an Nonmetallic Mineral Processing Plant that **only conducts screening and washing operations and not crushing operations**, would not be subject to 40 CFR Part 60, Subpart OOO.

Therefore, if the field offices review an air permit application that indicates that an air contaminant source might be subject to 40 CFR Part 60, Subpart OOO based upon the applicability section, i.e., **conducting only screening operations**, then it is the Agency's position that the air contaminant source is not subject to 40 CFR Part 60, Subpart OOO.

If you have any questions concerning this, please call Alan Lloyd of my staff at (614) 644-3613.

The Re-typed Determinations Submitted by the above Mentioned Applicant

August 3, 1986

U.S. Environmental Protection Agency (EPA)
Region IV
340 Courtland Street, N.E.
Atlanta, Georgia

4APT-AES

John W. Walton, P.E.
Chief
Division of Air Pollution Control
Tennessee Department of Environment and Conservation
410 Church Street
Nashville, Tennessee

Subject: Determination of Applicability of a Recycled Asphalt Crusher Begin Subject to 40 CFR Part 60, Subpart OOO (Standards of Performance for Nonmetallic Mineral Processing Plants)

Dear Mr. Walton:

We have received your June 13, 1995, letter requesting that the U.S. Environmental Protection Agency (EPA) provide you with an official determination concerning the applicability of Subpart 000 to asphalt recycle crushers. After a careful evaluation of the information provided by the Tennessee Department of Environment and Conservation (TDEC), we have concluded that if there is a reduction in the size of nonmetallic minerals during crushing of recycled asphalt, then the facility is subject to Subpart 000. However, if an asphalt crusher only breaks asphalt bonds and does not crush or grind nonmetallic minerals in the asphalt matrix, it is not subject to Subpart 000.

According to the information enclosed in your June 13, 1995, letter, in two previous determinations, EPA Region 5 has concluded that asphalt recycle crushers are subject to Subpart 000. However, in a verbal guidance provided to TDEC, Region 4 had indicated that asphalt recycle crushers may not be subject to Subpart 000 if the processing lines are solely dedicated to the recycling of finished products. This guidance was provided to your staff on the basis of determinations made by Region 4 in which we had concluded that glass and brick recycling operations are not subject to Subpart 000, and the basis for these determinations are that glass and brick are not nonmetallic minerals. Consequently, you have expressed concerns that the written EPA Region 5 determinations appear to contradict the verbal guidance previously provided to your staff by Region 4.

TDEC believes that an asphalt recycle crusher does not crush nonmetallic minerals. According to your letter, asphalt recycle crushers break up the asphalt material that binds the crushed stone together and do not further crush the stone in the mixture.

In order to resolve this issue, EPA Region 4 staff recently inspected a recycled asphalt facility and observed a Portac, model 345 crusher in operation. During the inspection it was observed that nonmetallic mineral chunks of two to three inches in the recycled asphalt were being crushed to a finished product size of less than half an inch. Based upon our inspection of this facility, it was clear that the size of the nonmetallic mineral contained in the recycled asphalt was being reduced by crushing. Therefore, we believe that applicability of Subpart 000 to recycled asphalt crushers depends upon whether nonmetallic minerals in the

asphalt matrix are ground or crushed in the facility. If nonmetallic minerals are crushed or ground, the facility would be subject to Subpart 000.

You also wanted to know whether machines that strip asphalt from roads for recycling are subject to Subpart 000. In our opinion, machines that strip asphalt from roads for recycling purposes are not subject to Subpart 000 since the primary purpose of the stripper is to remove large pieces of asphalt from the roads. Any crushing or grinding that occurs during stripping is minimal or incidental.

If you have any questions regarding the determination provided in this letter, please contact Mr. Haig of my staff at (404) 347-5014, extension 4147.

Sincerely,

James A. Harper
Chief
Air Enforcement Branch
Air, Pesticides & Toxics
Management Division

11/29/93

Applicability Determination Index Download Report

Subpart OOO

Control number: NR14

October 3, 1986

Mr. Carl Vogt
Wayne County Health Department
Air Pollution Control Division
2211 East Jefferson Street
Detroit, MI 48207

Dear Mr. Vogt:

This letter is pursuant to your request as to the applicability of 40 CFR part 60, Subpart 000: Standards of Performance for Non-Metallic Mineral Processing Plants.

Subpart 000, Section 60.670(a) defines the applicability and designation of affected facilities.

Except as provided in paragraphs (b), (c) and (d) of this section, the provisions of this subpart are applicable to the following affected facilities in fixed or portable non-metallic mineral processing plants: each crusher, grinding mill, screening operation, bucket elevator, belt conveyor, bagging operation storage bin, enclosed truck or railcar loading station.

The regulation goes on to define each of the above terms. Specifically, non-metallic mineral processing plant is defined as "any combination of equipment that is used to crush or grind any non-metallic mineral wherever located, including lime plants, power plants, steel mills, asphalt concrete plants, portland cement plants, or any other facility processing non-metallic minerals except as provided in Sections 60.670(b) and (c)".

The complete process at hand involves pneumatically conveying crushed lime into lime storage silos and exhausting the displaced air through a small baghouse. In addition, there is no equipment or combination of equipment used to crush or grind any non-metallic mineral at this plant. Therefore, it can be determined that the plant is not classified as a non-metallic mineral processing plant and consequently, 40 CFR Part 60, Subpart 000 is not applicable to this lime storage silo facility.

Sincerely,

Larry F. Kertcher, Chief
Air Compliance Branch (5AC-26), Region V2

a:\subpart.OOO

nsa

National Stone Association

JUL 15 1994

1415 Elliot Place, N.W. • Washington, D.C. 20007-2599 • 202/342-1100

July 8, 1994

CC: ALL DISTRICT & LOCAL AIR UNIT SUPERVISORS
JIM BRAUN
MISTY PARSINI
ALAN LLOYD
JIM ORLEMANN

Mr. Robert Hodanski, Chief
Air Pollution Control
Ohio EPA
P.O. Box 1049
Columbus, Ohio 43266-0149

Dear Mr. Hodanski:

The National Stone Association has been working with the U.S. Environmental Protection Agency for the last three years in a cooperative project to develop high-quality emission factors for the crushed stone industry.

The National Stone Association (NSA) is the national trade association representing the many interests of the crushed stone industry and whose over 500 members account for approximately 80 percent of the annual United States production of crushed stone.

Enclosed for your information is a copy of the new 11.19.2 CRUSHED STONE PROCESSING Section which will be included in the new fifth edition of AP-42 scheduled for publication this fall. This new AP-42 section, which is now available on EPA's Air Chief Bulletin Board, contains the new emission factors developed from test data from the cooperative testing program.

The focus of the testing program has been on PM_{10}, since that is the National Ambient Air Quality Standard, and the parameter which has a health-effects basis. However, I understand that the State of New Jersey will be using TSP (PM_{30}) to estimate emissions.

To estimate TSP emission factors, we recommend an approach based on the particle size multipliers in the current edition of AP-42. An estimate of the TSP (PM_{30}) emission factors can be obtained by multiplying the new PM_{10} emission factors by 2.11 (The average of the ratio of the PM_{30} to PM_{10} particle size multipliers in Section 11.2.1 Fugitive Dust and Section 11.2.3 Aggregate Handling and Storage Piles of the current AP-42 - see attached).

You will note that footnote c of Tables 11.9.2-1 and 11.9.2-2 contains a suggestion that TSP emissions can be estimated by multiplying the filterable PM emission factor by 0.80. We think that a better approach is to use the new PM_{10} emission factors as the basis for the estimation because they are based on high-quality, A-rated measured data. As the footnote states, there are no data available to support the approach based on filterable PM. Further, the TSP estimates based on 80% of filterable PM range from -35% to +2364% of the TSP estimates based on 2.11 x the new PM_{10} emission factors.

We expect to continue the testing program in the future and anticipate that it will produce data which can be used to refine the TSP emission factors.

Please call if you have questions or if we can provide additional information.

Sincerely,

William C. Ford, P.E.
Vice President Environmental Programs

cc: Bob Wilkinson, Ohio Aggregates Assn.

75th ANNIVERSARY nsa

Ratio of Particle Size Multipliers

$$\frac{PM_{30}}{PM_{10}} \quad \frac{0.73}{0.36} = 2.03$$

$$\frac{PM_{30}}{PM_{10}} \quad \frac{0.77}{0.37} = 2.08$$

$$\frac{PM_{30}}{PM_{10}} \quad \frac{0.80}{0.36} = 2.22$$

$$\frac{6.33}{3} = \underline{2.11}$$

Adding aggregate material to a storage pile or removing it usually involves dropping the material onto a receiving surface. Truck dumping on the pile or loading out from the pile to a truck with a front end loader are examples of batch drop operations. Adding material to the pile by a conveyor stacker is an example of a continuous drop operation.

The quantity of particulate emissions generated by a batch drop operation, per ton of material transferred, may be estimated, with a rating of C, using the following empirical expression[2]:

$$E = k(0.00090)\ \frac{\left(\frac{s}{5}\right)\left(\frac{U}{2.2}\right)\left(\frac{H}{1.5}\right)}{\left(\frac{M}{2}\right)^{2}\left(\frac{Y}{4.6}\right)^{0.33}} \quad (kg/Mg) \qquad (1)$$

$$E = k(0.0018)\ \frac{\left(\frac{s}{5}\right)\left(\frac{U}{5}\right)\left(\frac{H}{5}\right)}{\left(\frac{M}{2}\right)^{2}\left(\frac{Y}{6}\right)^{0.33}} \quad (lb/ton)$$

where: E = emission factor
k = particle size multipler (dimensionless)
s = material silt content (%)
U = mean wind speed, m/s (mph)
H = drop height, m (ft)
M = material moisture content (%)
Y = dumping device capacity, m^3 (yd^3)

The particle size multipler (k) for Equation 1 varies with aerodynamic particle size, shown in Table 11.2.3-2.

TABLE 11.2.3-2. AERODYNAMIC PARTICLE SIZE MULTIPLIER (k) FOR EQUATIONS 1 AND 2

Equation	< 30 μm	< 15 μm	< 10 μm	< 5 μm	< 2.5 μm
Batch drop	0.73	0.48	0.36	0.23	0.13
Continuous drop	0.77	0.49	0.37	0.21	0.11

The quantity of particulate emissions generated by a continuous drop operation, per ton of material transferred, may be estimated, with a rating of C, using the following empirical expression[3]:

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11.19.2 CRUSHED STONE PROCESSING

11.19.2.1 Process Description[1-2]

Major rock types processed by the rock and crushed stone industry include limestone, granite, dolomite, traprock, sandstone, quartz, and quartzite. Minor types include calcareous marl, marble, shell, and slate. Industry classifications vary considerably and, in many cases, do not reflect actual geological definitions.

Rock and crushed stone products generally are loosened by drilling and blasting, then are loaded by power shovel or front-end loader into large haul trucks that transport the material to the processing operations. Techniques used for extraction vary with the nature and location of the deposit. Processing operations may include crushing, screening, size classification, material handling, and storage operations. All of these processes can be significant sources of PM and PM-10 emissions if uncontrolled.

Quarried stone normally is delivered to the processing plant by truck and is dumped into a hoppered feeder, usually a vibrating grizzly type, or onto screens, as illustrated in Figure 11.19.2-1. The feeder or screens separate large boulders from finer rocks that do not require primary crushing, thus reducing the load to the primary crusher. Jaw, impactor, or gyratory crushers are usually used for initial reduction. The crusher product, normally 7.5 to 30 centimeters (3 to 12 inches) in diameter, and the grizzly throughs (undersize material) are discharged onto a belt conveyor and usually are conveyed to a surge pile for temporary storage, or are sold as coarse aggregates.

The stone from the surge pile is conveyed to a vibrating inclined screen called the scalping screen. This unit separates oversized rock from the smaller stone. The undersize material from the scalping screen is considered to be a product stream and is transported to a storage pile and sold as base material. The stone that is too large to pass through the top deck of the scalping screen is processed in the secondary crusher. Cone crushers are commonly used for secondary crushing (although impact crushers are sometimes used), which typically reduces material to about 2.5 to 10 centimeters (1 to 4 inches). The material (throughs) from the second level of the screen bypasses the secondary crusher because it is sufficiently small for the last crushing step. The output from the secondary crusher and the throughs from the secondary screen are transported by conveyor to the tertiary circuit, which includes a sizing screen and a tertiary crusher.

Tertiary crushing is usually performed using cone crushers or other types of impactor crushers. Oversize material from the top deck of the sizing screen is fed to the tertiary crusher. The tertiary crusher output, which is typically about 0.50 to 2.5 centimeters (3/16th to 1 inch), is returned to the sizing screen. Various product streams with different size gradations are separated in the screening operation. The products are conveyed or trucked directly to finished product bins, open area stockpiles, or to other processing systems such as washing, air separators, and screens and classifiers (for the production of manufactured sand).

Some stone crushing plants produce manufactured sand. This is a small-sized rock product with a maximum size of 0.50 centimeters (3/16th inch). Crushed stone from the tertiary sizing screen is sized in a vibrating inclined screen (fines screen) with relatively small mesh sizes. Oversized material is processed in a cone crusher or a hammermill (fines crusher) adjusted to produce small diameter material. The output is then returned to the fines screen for resizing.

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In certain cases, stone washing is required to meet particular end product specifications or demands, as with concrete aggregate processing. Crushed and broken stone normally is not milled but is screened and shipped to the consumer after secondary or tertiary crushing.

11.19.2.2 Emissions And Controls[1-4,7-8]

Emissions of PM and PM-10 occur from a number of operations in stone quarrying and processing. A substantial portion of these emissions consists of heavy particles that may settle out within the plant. As in other operations, crushed stone emission sources may be categorized as either process sources or fugitive dust sources. Process sources include those for which emissions are amenable to capture and subsequent control. Fugitive dust sources generally involve the reentrainment of settled dust by wind or machine movement. Emissions from process sources should be considered fugitive unless the sources are vented to a baghouse or are contained in an enclosure with a forced-air vent or stack. Factors affecting emissions from either source category include the stone size distribution and surface moisture content of the stone processed; the process throughput rate; the type of equipment and operating practices used; and topographical and climatic factors.

Of geographic and seasonal factors, the primary variables affecting uncontrolled PM emissions are wind and material moisture content. Wind parameters vary with geographical location, season, and weather. It can be expected that the level of emissions from unenclosed sources (principally fugitive dust sources) will be greater during periods of high winds. The material moisture content also varies with geographic location, season, and weather. Therefore, the levels of uncontrolled emissions from both process emission sources and fugitive dust sources generally will be greater in arid regions of the country than in temperate ones, and greater during the summer months because of a higher evaporation rate.

The moisture content of the material processed can have a substantial effect on emissions. This effect is evident throughout the processing operations. Surface wetness causes fine particles to agglomerate on, or to adhere to, the faces of larger stones, with a resulting dust suppression effect. However, as new fine particles are created by crushing and attrition, and as the moisture content is reduced by evaporation, this suppressive effect diminishes and may disappear. Plants that use wet suppression systems (spray nozzles) to maintain relatively high material moisture contents can effectively control PM emissions throughout the process. Depending on the geographic and climatic conditions, the moisture content of mined rock may range from nearly zero to several percent. Because moisture content is usually expressed on a basis of overall weight percent, the actual moisture amount per unit area will vary with the size of the rock being handled. On a constant mass-fraction basis, the per-unit area moisture content varies inversely with the diameter of the rock. Therefore, the suppressive effect of the moisture depends on both the absolute mass water content and the size of the rock product. Typically, wet material contains 1.5 to 4 percent water or more.

A variety of material, equipment, and operating factors can influence emissions from crushing. These factors include (1) stone type, (2) feed size and distribution, (3) moisture content, (4) throughput rate, (5) crusher type, (6) size reduction ratio, and (7) fines content. Insufficient data are available to present a matrix of rock crushing emission factors detailing the above classifications and variables. Available data indicate that PM-10 emissions from limestone and granite processing operations are similar. Therefore, the emission factors developed from the emission data gathered at limestone and granite processing facilities are considered to be representative of typical crushed stone processing operations. Emission factors for filterable PM and PM-10 emissions from crushed stone processing operations are presented in Tables 11.19-1 (Metric units) and -2 (English units).

Emission factor estimates for stone quarry blasting operations are not presented here because of the sparsity and unreliability of available test data. While a procedure for estimating blasting emissions is presented in Section 11.24, Western Surface Coal Mines, that procedure should not be applied to stone quarries because of dissimilarities in blasting techniques, material blasted, and size of blast areas. Milling of fines is not included in this section as this operation is normally associated with nonconstruction aggregate end uses and will be covered elsewhere when information is adequate. Emission factors for fugitive dust sources, including paved and unpaved roads, materials handling and transfer, and wind erosion of storage piles, can be determined using the predictive emission factor equations presented in AP-42 Section 13.2.

Table 11.19.2-1 (Metric Units).
EMISSION FACTORS FOR CRUSHED STONE PROCESSING OPERATIONS[a]

Source[b]	Filterable PM[c]	EMISSION FACTOR RATING	PM-10	EMISSION FACTOR RATING
Screening (SCC 3-05-020-02,-03)	0.073[d]	E	0.0076[e]	C
Screening with wet suppression (SCC 3-05-020-02-03)	0.0042[d]	E	0.00042[e]	C
Primary crushing (SCC 3-05-020-01)	0.00015[f]	E	ND	
Secondary crushing (SCC 3-05-020-02)	[g]	E	[g]	E
Tertiary crushing (SCC 3-05-020-03)	0.018[h]	E	0.0012[j]	C
Primary crushing with wet suppression (SCC 3-05-020-01)	ND		ND	
Secondary crushing with wet suppression (SCC 3-05-020-02)	[g]	E	[g]	E
Tertiary crushing with wet suppression (SCC 3-05-020-03)	0.00019[h]	E	0.00029[j]	C
Fines crushing[k] (SCC 3-05-020-05)	0.36	E	0.0075	E
Fines crushing with wet suppression[k] (SCC 3-05-020-05)	0.067	E	0.0010	E
Fines screening[k] (SCC 3-05-020-21)	0.15	E	0.036	E
Fines screening with wet suppression[k] (SCC 3-05-020-21)	0.0013	E	0.0011	E
Conveyor transfer point[m] (SCC 3-05-020-06)	0.013	E	0.00072	D
Conveyor transfer point with wet suppression[m] (SCC 3-05-020-06)	6.9×10^{-5}	E	2.4×10^{-5}	D
Wet drilling: unfragmented stone[n] (SCC 3-05-020-10)	ND		4.0×10^{-5}	E
Truck loading: fragmented stone[n] (SCC 3-05-020-31)	ND		8.0×10^{-6}	E
Truck loading—conveyor: crushed stone[p] (SCC 3-05-020-32)	ND		5.0×10^{-5}	E

[a]Emission factors represent uncontrolled emissions unless noted. Emission factors in kg/Mg of material throughput. SSC = Source Classification Code. ND = no data available.
[b]Sources controlled with wet suppression maintain a material moisture content ≥ 1.5 percent. Sources that process material with a moisture content of <1.5 percent are considered to be uncontrolled.
[c]Based on information provided in AP-42 Section 13.2.1, total suspended particulate (TSP) emissions can be estimated by multiplying the filterable PM emission factor by 0.80. However, no data are available to support this approximation, and the calculated TSP emission factors are not suitable for rating or inclusion in AP-42.
[d]References 6, 11, 15-16.
[e]References 9, 11, 15-16.
[f]Reference 1.
[g]No data available, but emission factors for tertiary crushing can be used as an upper limit for secondary crushing
[h]References 11, 15-16.
[j]References 10-11, 15-16.
[k]Reference 12.
[m]References 13-14.
[n]Reference 3.
[p]Reference 4.

Table 11.19.2-2 (English Units).
EMISSION FACTORS FOR CRUSHED STONE PROCESSING OPERATIONS[a]

Source[b]	Filterable PM[c]	EMISSION FACTOR RATING	PM-10	EMISSION FACTOR RATING
Screening (SCC 3-05-020-02,-03)	0.15[d]	E	0.015[e]	C
Screening with wet suppression (SCC 3-05-020-02-03)	0.0084[d]	E	0.00084[e]	C
Primary crushing (SCC 3-05-020-01)	0.00070[f]	E	ND	
Secondary crushing (SCC 3-05-020-02)	[g]	E	[g]	E
Tertiary crushing (SCC 3-05-020-03)	0.036[h]	E	0.0024[i]	C
Primary crushing with wet suppression (SCC 3-05-020-01)	ND		ND	
Secondary crushing with wet suppression (SCC 3-05-020-02)	[g]	E	[g]	E
Tertiary crushing with wet suppression (SCC 3-05-020-03)	0.0016[h]	E	0.00059[j]	C
Fines crushing[k] (SCC 3-05-020-05)	0.72	E	0.015	E
Fines crushing with wet suppression[k] (SCC 3-05-020-05)	0.13	E	0.0020	E
Fines screening[k] (SCC 3-05-020-21)	0.30	E	0.071	E
Fines screening with wet suppression[k] (SCC 3-05-020-21)	0.0036	E	0.0021	E
Conveyor transfer point[m] (SCC 3-05-020-06)	0.026	E	0.0014	E
Conveyor transfer point with wet suppression[m] (SCC 3-05-020-06)	0.00014	E	4.8×10^{-5}	D
Wet drilling: unfragmented stone[n] (SCC 3-05-020-10)	ND		8.0×10^{-5}	E
Truck unloading: fragmented stone[n] (SCC 3-05-020-31)	ND		1.6×10^{-5}	E
Truck loading—conveyor: crushed stone[p] (SCC 3-05-020-32)	ND		0.00010	E

[a]Emission factors represent uncontrolled emissions unless noted. Emission factors in lb/ton of material throughput. SCC = Source Classification Code. ND = no data available.
[b]Sources controlled with wet suppression maintain a material moisture content ≥ 1.5 percent. Sources that process material with a moisture content of < 1.5 percent are considered to be uncontrolled.
[c]Based on information provided in AP-42 Section 13.2.1, total suspended particulate (TSP) emissions can be estimated by multiplying the filterable PM emission factor by 0.80. However, no data are available to support this approximation, and the calculated TSP emission factors are not suitable for rating or inclusion in AP-42.
[d]References 6, 11, 15-16.
[e]References 9, 11, 15-16.
[f]Reference 1.
[g]No data available, but emission factors for tertiary crushing can be used as an upper limit for secondary crushing.
[h]References 11, 15-16.
[i]References 10-11, 15-16.
[k]Reference 12.
[m]References 13-14.
[n]Reference 3.
[p]Reference 4.

References for Section 11.19.2

1. *Air Pollution Control Techniques for Nonmetallic Minerals Industry*, EPA-450/3-82-014, U. S. Environmental Protection Agency, Research Triangle Park, NC, August 1982.

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3. P. K. Chalekode *et al.*, *Emissions from the Crushed Granite Industry: State of the Art*, EPA-600/2-78-021, U. S. Environmental Protection Agency, Washington, DC, February 1978.

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5. F. Record and W. T. Harnett, *Particulate Emission Factors for the Construction Aggregate Industry, Draft Report*, GCA-TR-CH-83-02, EPA Contract No. 68-02-3510, GCA Corporation, Chapel Hill, NC, February 1983.

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7. C. Cowherd, Jr. *et al.*, *Development of Emission Factors for Fugitive Dust Sources*, EPA-450/3-74-037, U. S. Environmental Protection Agency, Research Triangle Park, NC, June 1974.

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9. J. Richards, T. Brozell, and W. Kirk, *PM-10 Emission Factors for a Stone Crushing Plant Deister Vibrating Screen*, EPA Contract No. 68-D1-0055, Task 2.84, U. S. Environmental Protection Agency, Research Triangle Park, NC, February 1992.

10. J. Richards, T. Brozell, and W. Kirk, *PM-10 Emission Factors for a Stone Crushing Plant Tertiary Crusher*, EPA Contract No. 68-D1-0055, Task 2.84, U. S. Environmental Protection Agency, Research Triangle Park, NC, February 1992.

11. W. Kirk, T. Brozell, and J. Richards, *PM-10 Emission Factors for a Stone Crushing Plant Deister Vibrating Screen and Crusher*, National Stone Association, Washington DC, December 1992.

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13. T. Brozell, *PM-10 Emission Factors for Two Transfer Points at a Granite Stone Crushing Plant*, EPA Contract No. 68-D0-0122, U. S. Environmental Protection Agency, Research Triangle Park, NC, January 1994.

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OEPA inter-office communication

o: Distribution date: September 9, 1996

om: Mike Hopkins, AQM&P, and Jim Orlemann, Engineering, DAPC

subject: PM emissions from spray booths and ovens, and PTI preparation

As some of you know, an official determination has been made by our legal staff concerning particulate emissions from spray booths. This issue has been raised by Title V PTO applicants and during an enforcement case settlement. Attached is a copy of the e-mail from Jim Orlemann that explains this determination. Below are our comments pertaining to PTI preparation.

Paint Spray Booths

Typically, spray booths have some amount of particulate or paint droplets that are not captured or controlled by filters or a water wash used to capture the over spray. This results in the source technically being subject to rules 3745-17-07 and 17-11. In future PTIs, the following should be done:

Cite applicable particulate rules under the Air Emission Summary.

Calculate the PM emissions based upon the solids content of the paint and the transfer efficiency (TE), which indicates the % of solids reaching the part, to get the solids lost (1 - TE), and the uncontrolled mass rate of emissions. Then take into account the reduction in PM made by the control system to set the PTI allowable. Use the best information available to you to determine the appropriate transfer efficiency. One source is the 40 CFR Part 60 NSPS requirements (60.313, 60.392 or 60.452) for those type of sources.

When Figure II applies and is more stringent than Table I, the controlled mass rate of emissions should be compared to the Figure II allowable to determine if the unit complies with 17-11. If Table I applies and is more stringent than Figure II, the unit's controlled emissions should be compared to that allowed by Table I to determine compliance. For Table I, the maximum process weight rate of the unit should be used (paint employed) to define the allowable.

The attached e-mail states that dry filters or water wash normally will be required to comply with 17-11. We believe that these controls represent BAT for these sources, since one or the other is commonly used in spray booths.

Ovens

Direct-fired ovens using natural gas normally would not be subject to 17-07 or 17-11. In some rare situations, e.g., involving the use of powder coatings, there may be visible emissions from the oven. The visible emissions may be due to solid particles or condensed organic compounds. In ch cases, 17-07 and 17-11 would be applicable to the oven. The PWR_{max} ld be based upon the total amount of coatings on the materials passing gh the oven, and the allowable emission rate normally would be defined e I.

ct-fired ovens, 17-07 and 17-10 should be cited. The allowable cermined from 17-10, which would be 0.020 lb/mmBtu.

Please share this information with all permitting staff. If you have any questions, please contact us at (614) 644-2270. Thank you.

DISTRIBUTION

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NSR Bulletin 1 - Introduction, Calculations and Synthetic Minor Rule Cite

Introduction

The Central Office - NSR Unit would like to make use of the e-mail system to inform DO/Laa permit writers of developments and provide instructions for worksheet preparation. These e-mails will be used mainly to provide quick updates, while the Engineering Guides and other formal guidance will still be utilized for major topics. Some of you may recall the first issue of a newsletter earlier this year, however, we now plan to use the e-mail system (the earlier newsletter article on AP-42 has been incorporated here for reference).

These e-mail Bulletins should be considered written guidance from Central Office, to be permanently kept and used for reference. They will be sent to the main PTI contacts at each office (two or three key people - please check to see whether your appropriate people are receiving this). Those contacts should make sure that all staff permit writers receive the information. I will be the main person developing these e-mail Bulletins, by working with Mike Hopkins, AQM&P Section Manager, but as always, if you have any permitting questions, please contact the Central Office NSR contact for your area (Alan Lloyd, Safaa El-Oraby, Joe Loucek or myself). In addition, we would like to introduce our newest staff member, Sudir Singhal, who has recently joined our group. Please feel free to contact us with comments, or make suggestions for future topics.

Calculations: Use of AP-42 Emission Factors (from NSR Newsletter v.1.n.1.)

In a recent netting PTI, the Feds denied it in the first go round because we did not use the most recent AP-42 emission factors available in a supplement to the fifth edition. As far as the Feds are concerned, if the emission factors are on their website, they are to be used. The default edition of AP-42 to be used is the fifth edition. Both the supplements and the fifth edition of AP-42 are available on the web. The address is:

http://www.epa.gov/ttn/chief/ap42etc.html

This web page has a link to the page with the supplements. You will need to download it and open it in Adobe Acrobat.

In future PTIs, when sighting AP-42 as the source for emission factors, please include the date shown on the bottom of the page for the section used, as well as the chapter number. For example, the most recent edition of AP-42 for unpaved roads was released 9/98. The correct sighting for this would be "AP-42 chapter 13.2.2 (9/98)." This clearly demonstrates to the PTI reviewer the source and edition used for quick reference and verification.

Rule Citation for Synthetic Minors

We want to reiterate what was decided on the rule citation aspect of Synthetic Minor PTI writing during the 6/17/99 field office permitting conference call. For Synthetic Minors to avoid PSD (or any preconstruction requirement), OAC 3745-31-05(D) would be listed in the rules column to correspond to the applicable emissions limitations (such as X tons per rolling 12-month period). For a Synthetic Minor to avoid Title V status, OAC 3745-35-07(B) would be listed in the rules column. These citations would be placed on the state and federal side of a bifurcated PTI. They are considered to be a federally enforceable requirement in all PTIs.

In addition, we view 3745-31-05(A)(3), BAT, as a state only requirement, therefore we would list the BAT requirements on the “state only side” of bifurcated PTIs. The rule citation should specifically be "OAC 3745-31-05(A)(3)" in all PTIs. This will differentiate BAT from the new citation for Synthetic Minors, 31-05(D).

November 16, 1999

Ohio EPA
Division of Air Pollution Control

inter-office communication

to:	***AQM&P Permit Review Staff, DO/laa Supervisors, Cindy DeWulf, Bob Hodanbosi, Tom Rigo, PMU PTI processing staff, TRI PTI review staff, Karon Gonzales - via e-mail***
from:	***Michael W. Ahern Environmental Supervisor, DAPC/PMU***
subject:	***Permit To Install related developments (some FYI and some specifically targeted affecting you, please read it all to see what applies)***
date:	***May 21, 1999***

A couple of meetings have occurred recently that affect how we process regular PTIs (Direct Final, Draft, Chapter 31 Modifications and Registrations). In addition some I thought I would take this opportunity to appraise you of some additional developments. Although not every topic affects ever person on the distribution list, please take a look at all that follows. You may find it interesting [... and if you do, you may need a vacation :)]

A synopsis of the recent NSR and PMU regular PTI processing meetings are as follows:

May 11, 1999 New Source Review meeting (with Susan Parkins and Mike Ahern attending from the PMU);

Discussions of returns -

1. After some discussion, it was confirmed/determined that the AQM&P staff will provide all returns in the new PTI format to the DO/laa Supervisor via e-mail. This applies to what have traditionally been identified as "Official Returns".
2. The DO/laa permit writer and Susan Parkins must be copied on the e-mail to the DO/laa Supervisor (in order to get stop the clock on the AQM&P review time) . The e-mail (or an attachment to the e-mail) will identify the areas of concern and will be in a format that is consistent from one AQM&P reviewer to another (via a standardized format with the most common reasons for return available in some sort of check-off section and a section for permit specific notes - Misty Parsons will be taking the lead on developing the form).
3. Upon receipt of the e-mail, the DO/laa permit staff will open the t&c file located on their LAN and make any necessary changes.
4. Upon review, the DO/laa Supervisor will send an e-mail directly to the AQM&P review staff with the changed t&c attached. In addition, the DO/laa Supervisor will attach an electronic copy of the Worksheet/BAT file associated with the permit recommendation. This step is being added to the original instructions because many times the Worksheet information changes as a result of a return. **NOTE: Attachment of the Worksheet should become effective as of June 1.**
5. NOTE: The Supervisor must copy Susan Parkins on the return e-mail. Susan will update

the PTI tracking database to get the return off the DO/laa clock.

6. Upon receipt of the revised t&c document and the electronic Worksheet files, the AQM&P staff will save the t&c file into the appropriate Central Office subdirectory (j:\aqmps\pti\complete) and print a hard copy of the Worksheet file (PMU will use this information to ensure the public notice of the issued document is accurate and the permit gets to the right place).

From this point on, the recommendation will proceed just like any other regular PTI.

A note to DO/laa Supervisors: I will be contacting you or one of your staff to update the Worksheet/BAT template file in order to incorporate the common return reasons developed by the Permit Workgroup in addition to a couple of formatting changes that will help the readability of the WS/BAT template and assist PMU in ensuring we use the correct PTI template for the front half of the permit. The revised template will be accompanied by a note to you indicating the specific changes and any special notes you will need to pass on to your staff.

May 20, 1998 PMU regular PTI processing meeting:
Mike Ahern, Susan Parkins, Erin Milner, Becky Castle, and Sandy Craig met to discuss regular PTI processing issues and the upcoming Intranet-based PTI processing system. Most of this synopsis will focus on the current processing system.

PMU will modify the internal flow of initial PTI recommendations in the following manner beginning June 01, 1999:

1. All new PTI recommendations will go to Erin Milner
2. Erin will enter the information into the PTI tracker and print out the file folder labels
3. Erin will then pass the labels and the Worksheets to Karon
4. Karon will enter the PTI information into Telnet, place labels on the PTI file folders, and provide the entire package to AQM&P (rubber banded along with the log) to Mike Hopkins, AQM&P. NOTE: this is a departure from the past in that the PTI recommendations will not pass over Susan Parkins desk at this stage).
5. Mike Hopkins will assign the permits for review and note accordingly on the PTI logs.
6. Mike will provide TRI with the permit files for their review.
7. Mike will provide Pam McGraner with the PTI log sheet (with assignments/NR noted) for Pam to enter into the PTI tracker and Telnet.
8. TRI will conduct their review and provide the NR files directly to PMU and the review files to the appropriate AQM&P permit review staff.
9. Upon return from TRI, Susan Parkins will begin reviewing all PTI recommendations for significant errors (e.g., sentences dropping off midway through the sentence, etc) in addition to checking the fees. This will apply to all recommendations. Susan will also check to ensure the terms and conditions document is in the j:\aqmps\pti\complete subdirectory for the word processors. If the file is not available, Susan will work with AQM&P to ensure the file is saved into the complete subdirectory.

In addition to the above mentioned processing steps for regular PTIs, the staff involved in processing regular PTIs will meet weekly to discuss the combined PTI/PTO workload for the

upcoming week. Susan Parkins will provide what is coming down the pike regarding PTOs and Becky Castle will provide what is coming down the pike for PTOs. Meetings will be held Mondays at 1:30 pm in conference room A or B.

NOTE FOR TRI STAFF In an effort to reduce the total processing time for regular PTIs, PMU requests that NO REVIEW PTIs be provided to the PMU in the following preferential order; Monday (early morning preferably), Tuesday, or Wednesday.
NOTE FOR AQM&P PERMIT REVIEW STAFF Reviewed permits should continue to be provided as soon as the review is complete. This will help balance workload and reduce total processing time.

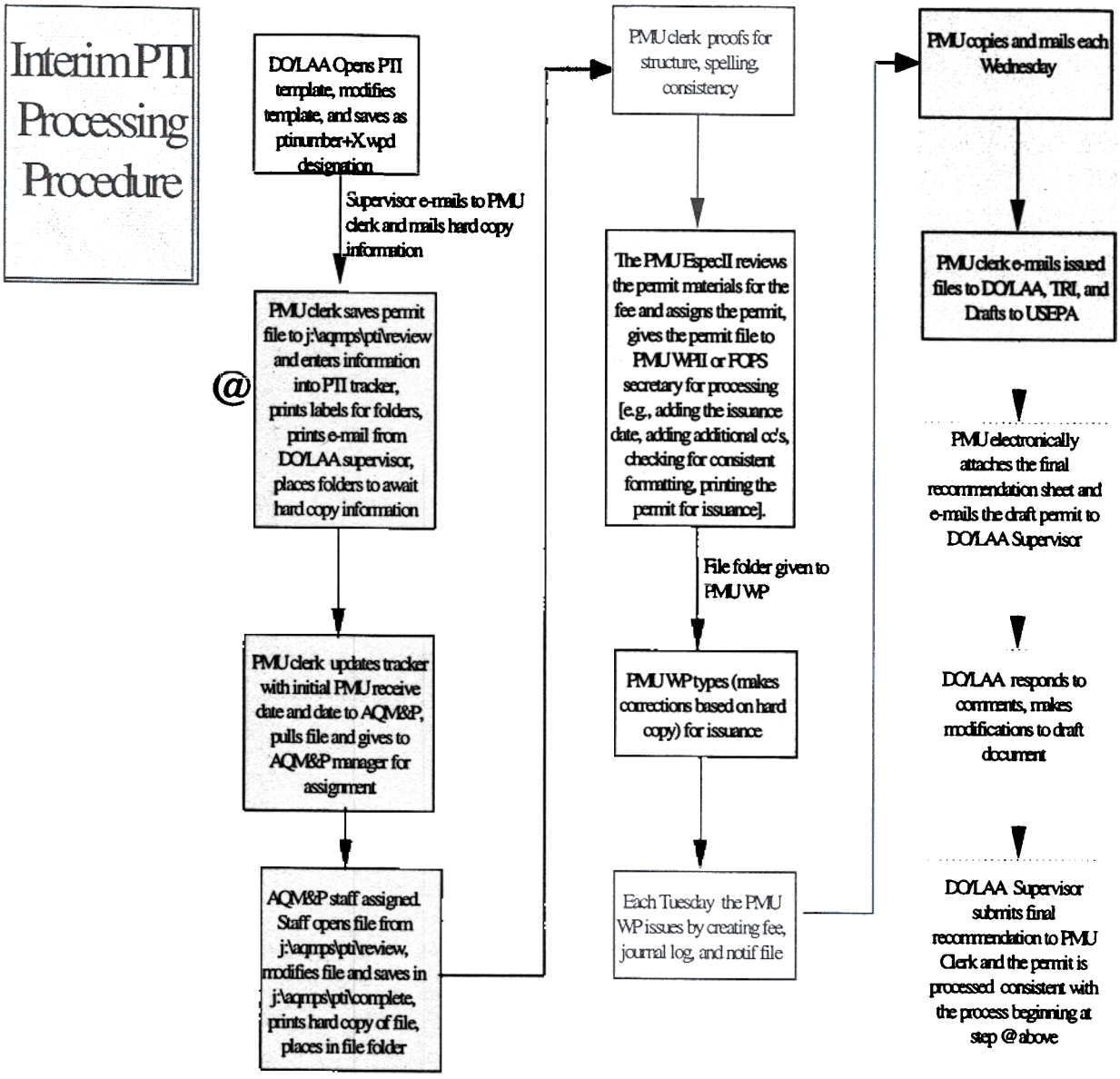
General Note - In order to increase the ability to proof more permits in a given week, PMU will solicit the assistance of Karon Gonzales to prepare issuance mailings and possibly assist in copying. Additionally, as a special project, Karon will be asked to assist in the annual PTI file purge.

During the meeting I also covered some of the Intranet-based PTI processing system. I showed the staff some of the screens and indicated that Susan Parkins will be assisting me in conducting a detailed review of what has been developed thus far. I will send out a separate update on this system as we get further along.

Other Item - IMPORTANT FOR DO/laa Supervisors:
Due to processing Draft and Final After Draft Administrative Modifications, please pass on to your staff the following file naming conventions:
Draft Modification ***ptinumberdm.wpd***
Final Recommendation Modification ***Ptinumberfm.wpd***
Direct final Administrative Modifications should continue to be identified as ***ptinumberm.wpd***

LAST ITEM for EVERYONE - Public Notice of Draft Actions:
PMU is investigating a change in how Draft permitting actions are handled. AS you may recall, the Division instituted a surrogate processing system for draft actions in 1997 as a result of the unreliability of being able to obtain actual publication dates in a timely or consistent manner. PMU is in the process of revising that system in order to, once again, be able to provide actual publication dates in a timely manner. The announcement of this system will be provided under separate correspondence and will outline the revise process flow of information. At that time, DO/laa personnel and the regulated community and public will be able to confidently know the actual comment period.

Interim PTI Workflow



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OEPA inter-office communication

o: Ed Fasko, Cleveland date: September 16, 1998

from: Misty Parsons mp through Mike Hopkins, AQM&P, DAPC

subject: Worksheet calculations and determining PTI allowables

You and I have previously discussed calculation methods used in preparing PTIs, and I had originally drafted this memo last year. I recently spoke with Roland Lacy, and he asked what we consider to be proper, state-wide calculations. Some basic guidance was provided in Mike Hopkins' December 9, 1997, memo. The calculations submitted by Cleveland are not necessarily incorrect, but we have a few comments on terminology, proper calculation and selection of the allowable.

Types of Calculations

The two most important types of calculations needed are

1 *Potential to emit, PTE* (based upon applying BAT, OAC 3745-31-05). This calculation is performed using the best information available to determine the short-term emissions (reliable factors from the company, AP-42, etc.). This short-term emission rate should represent the worst case operation possible based upon the physical design maximum (for some types of sources, a "reasonable" maximum PTE may be used). Next, figure in any capture and control efficiencies to get the controlled short-term. If this differs from the application, discuss this with the company. Finally, determine the TPY emissions for full time operation or the maximum possible yearly production capability, normally at 8760 hours/year.

2) *Calculation of the rule allowable amount* (when there is a rule). Examples of this would be a PM source that must comply with 17-11 (Fig. II or Table 1), or an OC source subject to OAC 3745-21-07(G)(2) Most rules specify the maximum amount of emissions allowed from existing sources. Most of our rules are federally enforceable (the version accepted by USEPA). The allowables set in the PTI can be no greater than the emission rate allowed by rule. [A rare exception would be something like when a 21-07(G)(9)(g) exemption is granted.] However, a unit may not be able to emit as much as the rule allows, because it's design generates less emissions (see PTE calculation).

Determining BAT and Setting PTI Allowables

BAT determinations for PTIs issued state-wide are case-by-case decisions, with several things being involved. BAT should represent the level that other similar sources recently permitted have been required to meet (in terms of technology and limits), as well as the level that is economically feasible, as determined by a BAT Study when one is needed (we do not require a study for all permits). Otherwise, the 3 possibilities for determining BAT and subsequently setting the PTI allowable are to use:

- the controlled potential for a controlled unit (otherwise use uncontrolled)
- the potential times a factor to increase it (as a cushion for margin of error in assumptions or when there may be a reasonable amount of deterioration as the source ages)
- the rule limit

If no rule exists, then you would clearly use the potential calculation result. If a rule applies, work the calculation for rule compliance, but

still set the PTI allowable at the level determined to be BAT. BAT can never be greater than what the rule allows, so it is either equal to or less than the rule. When the unit's PTE is well below the rule, it may not be appropriate to use the rule as the PTI allowable, and we often do not.

There are reasons that this can be important. For instance, the larger rule allowable could trigger the modeling or other requirements. The company would have to comply with modeling a higher number than they could ever possibly emit by design, and might fail the modeling.

In addition, even when a BAT determination other than the rule is set as the PTI allowable, the rule should still be listed under the Applicable Rules column in the PTI Air Emission Summary section. The rule is still applicable, and the unit must comply with both BAT and the rule. If a violation occurs, they could exceed both the PTI limit and the rule.

Suggested Changes to Cleveland Calculations

We are suggesting some changes to your calculation sheet. Please see the attached examples and our Example Calculations.

In your calculations, Uncontrolled and Potential Emissions are sometimes "back-calculated" from the actual emissions, by using a control efficiency. This might be a somewhat reliable number, if based upon a stack test, but otherwise, you should try to start with the uncontrolled PTE and use that to determine the other rates. The calculation of Actual Emissions can still be done, and it is asked for in the Form B, but actual should not be used as the PTI allowable.

For the Potential Emissions section, some detail should be provided as to how the short-term number was determined. Then multiply it up to get the TPY, which it appears you are correctly doing at 8760 hours/year.

Your calculation of rule compliance is currently labeled something like "State Allowable" or "Allowable Emissions" on your sheet. This is not necessarily correct. It may be better to term this "Rule Limit" so it's not mistaken as, or assumed to be, the PTI allowable, which has not been selected yet. The TPY calculation here should also be at 8760 hrs/yr.

We would suggest eliminating your Federal Allowable calculation section. It should just be a repeat of the above. Certain versions of most state rules are federally enforceable, but we view Chapter 31 and BAT as State Only enforceable. When you need to determine what is "State and Federally Enforceable" you can do this after you've done all the other calculations.

Other calculations that may be needed are a Synthetic Minor Restriction (on hours, for example) when a company wants to have it's emissions restricted by a federally enforceable PTI. You would use this TPY as the PTI allowable, and include federally enforceable terms and an attached Synthetic Minor write-up. You must also include the Netting calculations (normally company provided) for netting PTIs, and the Air Toxics or NAAQS Pollutant Modeling calculations for permits where this is required.

Please provide this information to your permit staff. If you have any questions or see any problems, please contact me. Thank you.

cc: Alan Lloyd
Safaa El-Oraby
Joe Loucek

Example Calculations
Suggested Changes to Cleveland's Standard Format
and Guidance on Proper Methods

No application has been reviewed by CO. This is only an example, and is not necessarily complete (all pollutants need review). Actual review may produce different conclusions.

5. Calculations:

Given one 120.8 mmbtu/hr natural gas boiler
Operating schedule: 2000 hours/year (application)
Lo-NOx burner
Emissions unit has no add-on control

PM/PM_{10}

Potential to Emit (PTE)
Company/manufacturer emissions estimate/factors.
None provided.

AP-42 Factor = 3 lb/mmft^3:
(120.8 mmbtu/hr)*(3 lb/mmft^3)*(1 ft^3/1000btu) = 0.36 lbs/hr [uncontrolled]
(0.36 lbs/hr)*(8760 hr/yr)*(1 ton/2000lb) = 1.58 TPY

Federally Enforcable Rules/Limits
PTE (the true max. PTE is Federally Enforceable)
OAC 3745-17-10
40 CFR Part 60, Subpart Db

Rule Limits
OAC 3745-17-10:
(120.8 mmbtu/hr)*(0.02 lb/mmbtu) = 2.41 lb/hr
[Note: The source potential is less than this rule allows, so it complies.]
(2.41 lb/hr)*(8760 hr/yr)*(1 ton/2000lb) = 10.56 TPY

40 CFR Part 60, Subpart Db:
No limit for natural gas fuel. [Note: the rule is still an applicable rule.]

Actual Emissions
(120.8 mmbtu/hr)*(3 lb/mmft^3)*(1 ft^3/1000btu) = 0.36 lbs/hr
(0.36 lbs/hr)*(2000 hr/yr)*(1 ton/2000lb) = 0.36 TPY

PTI Allowable
All PTIs must represent BAT. BAT can be equal to, or more stringent than, existing source rules.
The AP-42 estimate is lower than our rule. In order to avoid modeling for PM10, and to set BAT, the allowable will be set as follows: 0.01 lb/mmbtu
(120.8 mmbtu/hr)*(0.01 lb/mmbtu) = 1.21 lb/hr*
(1.21 lb/hr)*(8760 hr/yr)*(1 ton/2000lb) = 5.3 TPY

* Normally only one short term allowable is set, and 0.01 lb/mmbtu will be the choosen allowable in this case.

NOx

Potential to Emit (PTE)

Company/manufacturer emissions estimate/factors = 0.0375 lb/mmbtu:

(120.8 mmbtu/hr)*(0.0375 lb/mmbtu) = 4.53 lbs/hr [uncontrolled]
(4.53 lbs/hr)*(8760 hr/yr)*(1 ton/2000lb) = 19.84 TPY

AP-42 Factor = 81 lb/mmft3:

(120.8 mmbtu/hr)*(81 lb/mmft^3)*(1 ft^3/1000btu) = 9.78 lbs/hr [uncontrolled]
(9.78 lbs/hr)*(8760 hr/yr)*(1 ton/2000lb) = 42.84 TPY

Federally Enforcable Rules/Limits

PTE (the true max. PTE is Federally Enforceable)
40 CFR Part 60, Subpart Db

Rule Limit

No state rule exists

40 CFR Part 60, Subpart Db:

No limit for natural gas fuel. [Note: the rule is still an applicable rule.]

Actual Emissions

(120.8 mmbtu/hr)*(0.0375 lb/mmbtu) = 4.53 lbs/hr
(4.53 lbs/hr)*(2000 hr/yr)*(1 ton/2000lb) = 4.53 TPY

PTI Allowables

All PTIs must represent BAT. BAT can be equal to, or more stringent than, existing source rules.
Since this is a lo-NOx burner, the company's emissions estimate will be used, which is lower than AP-42.

(120.8 mmbtu/hr)*(0.0375 lb/mmbtu) = 4.53 lbs/hr
(4.53 lbs/hr)*(8760 hr/yr)*(1 ton/2000lb) = 19.84 TPY

Calculation Summary

Pollutant	Actual	PTE	State Only Enforceable*	State & Fed. Enforceable*	PTI Allowables
PM/PM10	(see above)	(see above)		0.01 lb/mmbtu and 5.3 TPY	0.01 lb/mmbtu and 5.3 TPY
NOx				4.53 lbs/hr & 19.84 TPY	4.53 lbs/hr and 19.84 TPY

* OAC 3745-31-05 BAT limits are State Only Enforceable, however, since these limits are at or above PTE, they are State and Federally Enforceable in this case.

NSR Discussion

The proposed source complies with all applicable rules. The NSPS rule is applicable and will be cited, although there are no limits in the rule for natural gas units. NSR/PSD is not triggered. No modeling is triggered in this case, since the modeling thresholds are not exceeded. This ____(is/is not) located at a Title V facility. And so forth.

City of Cleveland
Bureau of Air Pollution Control
EES - Emissions Calculation Form

1. Facility Name: The Medical Center Co.
2. Source Description: 120.8 MMBtu/Hr Natural Gas Boiler equipped with Low Nox Burner
3. Source Inspected: Yes ( ) No (x) Date:
4. Operating: Yes ( ) No (x)
5. Calculations:

AP-42 EMISSION FACTOR FOR NATURAL GAS PM = 3 LB/MMFT^3
Nox= 81 LB/MMFT^3

Nox BURNER DESIGN = 0.0375 LB/MMBTU
OPERATING HOURS / YEAR (from PTI application) 2000

LB/HR Calculation (120.8 MMBtu/Hr)*(3 lb/MMft^3)*(1ft^3/1000Btu) = 0.36 lb/hr PM
(120.8 MMBtu/Hr)*(81 lb/MMft^3)*(1ft^3/1000Btu) = 9.78 lb/hr NOx

Uncontrolled

(0.36 lb/hr)*(2000 hrs/yr)*(1 ton/2000 lbs) = 0.36 tons/year
should be 8760
(9.78 lb/hr)*(2000 hrs/yr)*(1 ton/2000 lbs) = 9.78 tons/year

Actual

PM: Actual = Uncontrolled

Boiler is equipped with a low Nox burner rated at 0.0375 lb/MMBtu actual heat input

Nox: (120.8 MMBtu/Hr)*(0.0375 lb/MMBtu) = 4.53 lb/hr
(4.53 lb/hr)*(2000 hrs/yr)*(1 ton/2000 lbs) = 4.53 tons/year

Allowable

From OAC 3745-17-10, Maximum Allowable for PM = 0.020 lb/MMBtu actual heat input

(120.8 MMBtu/hr)*(0.020 lb/MMBtu) = 2.41 lb/hr
(2.41 lb/hr)*(2000 hrs/yr)*(1 ton/2000 lbs) = 2.41 tons/year
should be 8760

Nox: N/A

Potential

PM: (.36 lb/hr)*(8760 hrs/yr)*(1 ton/2000 lbs) = 1.58 tons/year

Nox: (4.53 lb/hr)*(8760 hrs/yr)*(1 ton/2000 lbs) = 19.84 tons/year

Federal Allowable

PM: (2.41lb/hr)*(8760 hrs/yr)*(1 ton/2000 lbs) = 10.58 tons/year

N0x: N/A

Pollutant	Uncontrolled*	Actual*	State Allowable*	Potential**	Federal Allowable**
PM tpy	0.36	0.36	2.41	.58	10.58
NOx tpy	9.78	4.53	N/A	19.84	N/A

Source Class : Major [ ] Minor [ ] Other[x]
Recommendation: T-Status[| Approve[x] Deny[ ] Revoke[

Examiner Richard C Tayl Date: 7/16/98

*Based on actual operating hours **Based on 24 hours/day, 365 days/yr

Premise No. 13-18-00-7519 , Source No.P003 , PTI No:13-3195

City of Cleveland Bureau of Air Pollution Control
EES - Emissions Calculation Form

1. Facility Name: SPS Technologies, Inc.
2. Source Description: Grit Blaster
3. Source Inspected: [ ]Yes / [ ]No Date: _____
Source Operating: [ ]Yes / [ ]No

4. Calculations: operating schedule: avg. 12 hrs/day; max. 24hrs/day.
4380 hrs/yr 8760 hrs/yr

TSP: Uncontrolled Emissions: (capture efficiency is 100%)
[x (1-99%)] = 0.84 lb/hr
x = 84 lb/hr or 368 tpy

Back-calculated ? Needs more explanation

Actual Emission:
(0.84 lb/hr)*(4380 hrs/yr)*(1 ton/2000 lb) = 1.84 tpy

State Allowable: PWR: 4000 lb/hr
OAC 3745-17-11 Table I: allowable emission rate is 6.52 lb/hr
(6.52 lb/hr)*(4380 hrs/yr)*(1 ton/2000 lb) = 14.28 tpy
should be 8760

Potential emissions:
(1.84 tpy)*(8760 hrs/yr)*(4380 hrs/yr) = 3.68 tpy

Federal Allowable:
(6.52 lb/hr)*(8760 hrs/yr)*(1 ton/2000 lbs) = 28.56 tpy

5. Emissions (Tons/Yr):

Pollutant	Uncontrolled	Actual	State Allowable*	Potential**	Federal** Allowable
PART	368	1.84	14.28	3.68	28.56

This should probably be the PTI allowable, not 28.56

Source Class: Major[x], Minor[ ], Other[ ]

Recommendation: T-Status[ ], Approve[x], Deny[ ], Revoke[ ].

Examiner: El Perez Date: 12/19/96

* Based on actual operating hours,
**Based on 24 hours/day, 365 days/yr.

OEPA inter-office communication

to: DISTRIBUTION date: December 9, 1997

from: Mike Hopkins, AQM&P Section

subject: Update and Guidance on numerious important PTI review items

There have been a few recent decisions that effect the new source review (NSR) PTI program. As you know, our programs are evolving. We want to keep all permit writing staff up to date on current guidance. These are items to be aware of in the preparation of PTIs, which should be done correctly in order for the worksheet to be acceptable for issuance. Please share this information with all your permit writing staff.

PTI Preparation Items

A. Air Emission Summary

1. When the Air Toxics Policy is applicable as part of the BAT evaluation, the statement "Compliance with the Air Toxics Policy" should be listed under the BAT Determination in the Air Emission Summary.

2. For an emissions unit that is exempt from a rule, such as OAC 3745-21-07, due to use of non-PRM for example, the rule must still be listed under the Applicable Rules column. In addition, you should state under the BAT Determination that only non-photochemically reactive materials will be used.

3. All state and federal rules should be cited under the Applicable Rules column. These rules include namely the following: 3745-31-05; any applicable rules from Chapter 17 (such as 3745-17-07, 3745-17-08, 3745-17-11); any applicable rules from Chapter 21 (such as 3745-21-07, 3745-21-09); any from Chapter 18; any from Chapter 23; any from Chapter 75; and any from Chapter 15. These are most of the state rules that have emissions limits or relevant requirements (other ORC and OAC rules that do not have limits/requirements would still apply to a source, but do not need to be listed).

   As you know, the limit set for the allowable should result from the most stringent of all rules, including 31-05, the BAT rule. Therefore, all rules, not just the BAT rule, must be listed, no matter whether BAT is more stringent or not. We understand that the practice of listing all rules is also now being required by Jim Orlemann, Engineering Section, in PTO writing.

   When less stringent rules are also listed, they should be denoted in some way. We suggest that an asterisk be placed by any and all less stringent rules, with a footnote stating that they are less stringent than the rule that resulted in the limit (also a current PTO practice).

4. There should be a TPY allowable developed for each emission unit and it should be placed in the "Permit Allowable Mass Emissions..." column for the emission unit.

5. For a unit that is being modified, you should identify it as such under the emissions unit number (Ex., B001 modification), and explain the nature of the modification under the Source Description. Also, since that PTI will effectively replace the previous PTI for that unit, you should add language to the Additional Terms, Miscellaneous section, saying that the PTI supersedes the previous PTI for that emission unit, and give the emission unit number and the permit number of the PTI that is being replaced/superseded (something similar to the PTO language; see Tom Rigo's PTO guidance).

6. We would like to move towards a layout in the Air Emission Summary table that resembles the layout of the table in the emission unit specific terms and conditions in the PTO. The PTO group suggests that the permit limit established be listed on the same line as the rule upon which the limit is based.

   All you need to do here, for each emissions unit in the PTI, is list the limits/requirements (under Permit Allowable Mass Emissions and/or Control & Usage Requirements) opposite each Applicable Rule listed, instead of listing the rules line by line beneath each other. Please try this new format wherever possible.

B. Additional Terms and Stars Terms

   Several changes to the "toxics reopening" standard Stars term are needed. Part (c) of this term is not correct, since a PTI is not triggered when the TLV is made more stringent by ACGIH.. Please strike out this sentence, and be aware that a revised version with more changes is being prepared.

2. We would like the Additional Terms and Conditions of all PTIs to be organized with headings like those used in the emission unit Terms and Conditions of PTOs. They headings are: Applicable Emission Limitations and/or Control Requirements (optional when the Air Emission Summary has all the requirements), Operational Restrictions, Monitoring and/or Record Keeping Requirements, Reporting Requirements, Testing Requirements and Compliance Method Determinations, and Miscellaneous Requirements.

3. You are all becoming familiar with developing Compliance Method Determinations for PTOs. We recommend that you begin to include them in the Additional Terms of your PTIs.

4. We encourage the use of the Stars terms in PTIs whenever possible, and discourage the drafting of new language when Stars has terms that serve the purpose. However, some of the Stars terms being used in PTIs are written as if they are being placed in a PTO. Always check the term content, and revise it as needed so that it reads appropriately for the PTI.

   In addition, many monitoring and related recordkeeping and reporting requirements are included under that heading in the PTO General Terms, but the PTI does not have this information unless you add it to the Additional Terms. For instance, some of the Stars terms for reporting do not specify the reporting frequency, so make sure you include it.

C. Short term, Pounds/hour emissions limits

1. Draft guidance has been issued, but until it is finalized, please continue to place short-term, usually lbs/hr, emissions limits in all PTIs, with the exception of units like storage tanks, roads and storage piles. Feel free to call us and discuss any questions you have on short-term limits. All PTIs will continue to have tons/year limits for each emissions unit, and a total PTI TPY Summary section.

D. PSD/NSR Permits

1. When a PSD (or nonattainment area NSR Offset) permit has been issued in final form, the District/LAA staff permit writer needs to complete the submittal to the BACT/RACT/LAER Clearinghouse. This can be done by sending them the handwritten form, or done on-line.

2. We now have state rules that mirror the PSD and nonattainment area federal requirements, and they need to be cited under Applicable Rules for those type PTIs (OAC 3745-31-10 through 31-27).

E. Calculations and Review Information

1 Please submit complete calculations with each worksheet. We cannot accept PTI worksheets that have incomplete calculations, or that do not adequately explain the basis of the review. The calculations should be used to set the proper allowable. Several calculations normally are needed:

- short-term worst-case maximum and annual emissions at PTE (uncontrolled and controlled).
- rule allowable calculation (for example, the 17-11 Table 1 or Figure 2 calculation).
- calculation using emission factors (for example, a printout showing the AP-42 working and breathing loss for tanks; an equation showing emissions resulting from a particular ef used).
- actual emissions [for completing Form B; or helpful to know when developing federal or "state enforceable" emission limits (state limits to avoid or pass modeling, for example)].
- for a Synthetic Minor, you need to show how the restriction on hours, production or operation equates to the restricted permit allowable emissions limit.
- for a Netting, information showing past actual to future potential/allowable emissions is needed, ideally in a table that gives the net increases (if a complete table is in the application and Netting Determination as it should be, it does not have to be on the calculations sheet).
- whenever modeling is done, a review/calculation comparing the model result to the MAGLC (for toxics) or to the 1/2 increment state standard (NAAQS pollutants) is required. This should be written either on the printout or on a separate sheet attached to the printout.

In addition to calculations, a few offices submit a NSR write-up that tells important things about the review (such as whether NSPS was checked, but found not to apply). It would explain cases where no modeling was done, when it would otherwise appear to be needed. The CO reviewer would not know this without it being explained. Some record of these decisions is also needed in your files.

A separate write-up may not needed for all PTIs, but is often very helpful. This kind of explanation results in a PTI being better understood, and in some cases, not returned to the District/Local when it otherwise would have been. This NSR write-up is not mandatory, but the calculations section should explain any key or confusing things.

F. Miscellaneous Items

1. Please send an electronic copy of all Additional Terms greater than 2 pages in length to Mike Ahern via e-mail. The document should be saved as the PTI number (e.g., 016234.wpd) in WP 5.0/5.1 format. The text should be in courier 10 cpi or courier new regular. Use the F7 key to tab, do not use Italics, do not use special characters, formulas, text boxes, or any other special function in WordPerfect (these files are going into one of the oldest versions of WordPerfect available in the free world).

2. Please provide a basis for the fee (process weight, type of fuel burned, fee doubled for construction, etc.) and/or calculation(s) in order to clarify questions and minimize PTI delays (this can be on a separate sheet or written under the fee blank on the worksheet). [Ex., 10 mmBtu/hr boiler installed without a PTI would be calculated: $400*2 (started construction on or after 7/1/93, prior to obtaining a PTI) = $800]

3. Please do not photocopy the Form B to the back side of any of the worksheets. These documents are separated and entered by other staff. The Form B is a separate, 2-sided form.

PTI Appeals

A NSR staff member in CO (normally the person who reviewed the PTI, or the contact for that area of the state) will now be the main contact for resolving the appeal case. There had apparently been confusion or lack of coordination in the past. However, the roles of the staff involved will not really change.

When a PTI appeal occurs, an AGO attorney is assigned the case, and they will contact the DAPC CO NSR group. The CO NSR person will coordinate efforts and assist as needed. However, the DO/LAA permit writer will be the primary person responsible for working on the settlement, with CO providing guidance.

The DO/LAA permit writer will still be the key person involved in negotiations. They will:

- review the proposals submitted by the company to resolve the case (or make agency suggestions toward resolution), and discuss them with our attorney and the CO NSR contact;
- prepare permit changes that may be acceptable; and
- consult with the CO NSR contact and get their approval, before making any commitments.

Future PTI Changes

We are currently drafting major changes to the PTI. The format will be designed like the PTO with Emission Unit terms, and content changes will be made to the "boiler plate" at the front of the PTI. The main goal will be to make permit writing quicker, overall, since this way the PTI content can be transferred directly into the PTO, without time consuming rearrangement. Mike Hopkins, Misty Parsons and Mike Ahern are the main contacts for this project.

Central Office PTI Contacts

We also understand that there has been some confusion about permit writing since the Title V and PTO programs have been evolving. We are working to make many permit writing specifics consistent between the PTI and PTO programs. However, at the present, we have not finalized guidance for certain key elements in permit writing, such as the guidance on applying short-term emission limits. If you have any questions when preparing PTIs and modifications, or when deciding whether to supersede or modify a certain permit, please contact us. Below is the listing of CO PTI staff, by area.

Alan Lloyd	Safaa El-Oraby	Misty Parsons
SWOAPCA	NEDO	Cleveland
RAPCA	Akron	Portsmouth
SWDO	CDO	SEDO
NWDO	Canton	Toledo
		NOVAA (former area)

Please feel free to contact the staff person for your area, or if they are unavailable, one of the other NSR staff or Mike Hopkins at (614) 644-2270. Thank you.

DISTRIBUTION

Don Waltermeyer, NWDO	Bob Goulish, NEDO	Phil Hinrichs, SWDO
Sam Araj, NWDO	Dennis Bush, NEDO	Ce'sar Zapata, CDO
Fred Klingelhafer, SEDO	Ron Hancher, SEDO	Tim Wilson, RAPCA
Bruce Blankenship, Canton	Frank Markunas, Akron	Curt Marshall, RAPCA
Brad Miller, Cincinnati	Ed Fasko, Cleveland	Karen Granata, TDOES
Don Walden, Portsmouth		

cc:	Alan Lloyd, AQM&P	Misty Parsons, AQM&P	Safaa El-Oraby, AQM&P
	Mike Ahern, PMU	Tom Tucker, AQM&P	Paul Koval, AQM&P
	Jim Orlemann, Eng.	Tom Rigo, FO	

MH/MP

OhioEPA

Ohio Environmental Protection Agency
Division of Air Pollution Control

INTER-OFFICE COMMUNICATION

Distribution via E-Mail Only

FROM: Mike Hopkins, Manager, AQM&P

DATE: August 4, 1997

Establishment of Limits in Permits to Install, Permits to Operate and Title V Permits

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Attached is a draft of a proposed engineering guide. This is being sent via e-mail to all DO/LAA engineering unit supervisors and Air Unit Supervisors. Please distribute this to all staff involved in the preparation of permit to install limits and terms and conditions. Please review the draft guide and submit your comments to Mike Hopkins, DAPC by Friday, August 22, 1997.

If you have any questions, please ask.

MH/
\ioc\tperyr.wpd

attachment

Distribution

Bob Hodanbosi, DAPC
Tom Rigo, DAPC
Jim Orlemann, DAPC
Misty Parsons, DAPC
Safaa El-Oraby, DAPC
Alan Lloyd, DAPC
Pam Smith, DAPC
Mike Ahern, DAPC
All DO/LAA Air Unit Supervisors
All DO/LAA Engineering Unit Supervisors

Ohio EPA

Division of Air Pollution Control

Engineering Guide # xx

Question:

How should DO/LAA permit writing staff decide what emission limits should be listed in permits to install (PTIs)? Which limits in PTIs are enforceable, which ones are not?

Answer:

First, it is almost impossible to describe all possible situations where limits should be established in PTIs. Often, DO/LAA staff will need to use good common sense to decide if a limit is necessary. However, certain general statements can be made concerning which limits are appropriate and which ones are not

As a general statement, limits should be established in a PTI whenever any applicable rule applies or whenever any Ohio EPA guidance requires a limit. Any limits that are not required by a rule or guidance should only be established after careful consideration of the need for the limit. In establishing limits, DO/LAA staff should always be thinking of how compliance with the

limit will be demonstrated. The following limits should always be established in a PTI:

1. Limits should be specified whenever they are listed in any applicable rule. For example, these limits may be in terms of pounds per hour, pounds of VOC per gallon of coating, grain per dry standard cubic feet, percent opacity etc. These may also be in the form of work practice standards, concentration-based limits or other various limits Remember that you will almost always need a pound per hour limit for any source significant enough to have an emissions test or significant enough to have a continuous monitor for that pollutant. Also remember that if more than one limit applies, you only need to list the most stringent limit in the permit.

2. A pounds per hour, pounds per day or pounds per week limit should be listed for any emissions unit that chooses to comply with the Best Available Technology rule by the use of the Ohio EPA Air Toxics Policy and the potential to emit must be restricted to be in compliance with the Air Toxics Policy (ie. if the source complies with the Air Toxic Policy at maximum operation, no additional limits are necessary

Most of the time this would be the pounds per hour limit that was used in the computer modeling for the Air Toxics Policy. However, when the option under the Air Toxics Policy that allows for an adjustment for a non-forty-hour week is used, a daily or weekly limit is appropriate

3. A short term limit should be established based on U.S guidance and/or Ohio EPA guidance for any emissions unit that is part of a "synthetic minor" permit which is developed to avoid attainment or nonattainment new source review requirements. (See an explanation of "short term limit" below.)

4. Pounds per hour limits should be established for any pollutant where modeling was required to demonstrate compliance with the National Ambient Air Quality Standards, the PSD significants/increment levels or the Ohio EPA the PSD increment policy

5. In addition to the above, a ton per year limit should be established for each emissions unit listed in the PTI Typically this limit should represent the maximum potential to emit of the emissions unit unless the emissions unit is

operationally restricted or a tighter limit is established to avoid modeling or other permitting requirements see the last question and answer

Note that it is normally not necessary or recommended that DO/LAA staff add more emission limits than are necessary to meet the above five criteria. It is also not normally necessary to add more than one short term limit. For instance, for a process operation that emits only VOC, uses no air toxics, and is not a "synthetic minor," a pounds per hour limit for VOC or a VOC content limitation (for coatings or inks is all that is needed for a short term limit. You would not normally need pounds per week, pounds per month, pounds per quarter limits or any operational restriction pertaining to the production capacity.

The term "short term limit" has two different meanings Normally, "short term limit" means the limit established in an applicable rule or policy. For example, the pound per hour, grain per dry standard cubic feet, or opacity limits

U.S. EPA uses "short term limit" to describe something other than an annual limit that restricts the potential to emit for the emissions unit below major source thresholds. This can be an

hourly limit, a daily limit, a monthly limit, or even a rolling 12-month or 365-day limit, where U.S. EPA's policies allow These limits are used in "synthetic minor" permits where a company is trying to avoid major new source review by restricting the facility's potential to emit.

Each emissions unit in a PTI should have a ton per year limit listed under the Permit Allowable section. In addition, the total allowables, in tons per year, for each pollutant should be listed under the Summary, Total Permit to Install Allowable Emissions section and should be the sum of the tons per year limits listed in the Permit Allowable section. The Ohio EPA does not consider the Summary section to be enforceable. This section is strictly for informational purposes only. The ton per year limits under the Permit Allowable section is considered to be State enforceable. It is not considered to be federally enforceable. U.S. EPA considers only short term limits to be federally enforceable. The following language will be added to each PTI to make this clear:

> *"The information contained under the Summary of Emissions section of the Permit to Install is for informational purposes only and is not enforceable."*

Usually, a ton per year limit is based on the maximum allowable short term limit multiplied by 8760 hours per year. It should represent the maximum annual emissions the emissions unit is capable of emitting if it operates in compliance throughout year. In other cases, the tons per year limit is based upon restricted operation and/or a more stringent short term limit than required by the applicable rules.

For uncontrolled sources, if the tons per year limit is based on the true potential to emit of the emissions unit, then no periodic recordkeeping or reporting is necessary. The one-time calculation of compliance contained in the permit to install application is sufficient. If the tons per year limit is based on some kind of restricted operation and/or emissions limit that restricts the emissions to below potential levels (including the use of control equipment), then some type of recordkeeping exceedance reporting is often needed. This determination should be made based on the guidance contained in Engineering Guide #65.

<u>Question</u>:

In the past for a source that had minimal actual emissions during planned normal operations and large potential emissions, but where potential emissions were smaller than major source thresholds we set the tons per year allowables to be no more of actuals (or something similar). Should we continue to do this?

Answer:

The advantage of restricting the tons per year limits below the potential to emit is to avoid some state modeling requirements, to avoid controls required by BAT, and to minimize the amount of "growth" consumed by the new source (this allows more "room" new sources in an air quality area). By setting a restriction, the tons per year allowable would be lower. Since the state modeling requirements are based on ton per year thresholds, some modeling can be avoided. This should only be done under the following conditions:

1) The DO/LAA staff has contacted the company and discussed the advantages and disadvantages of the additional restriction and the company has agreed to the restriction; and

2) The permit has appropriate recordkeeping and exceedance reporting to monitor compliance with the created limit.

Remember that even if you set ton per year limits tighter than the potential to emit of the source, you should not do the same for the short term limits. Short term limits should always be based on the enforceable potential to emit of the equipment

August xx

c\tperyr.wpd

Ohio EPA

Ohio Environmental Protection Agency
Division of Air Pollution Control

INTER-OFFICE COMMUNICATION

TO: Distribution

FROM: Mike Hopkins, Manager, AQM&P and Jim Orlemann, Manager, Engineering through Bob Hodanbosi, Chief, DAPC

DATE: March 21, 1997

RE: Location of Permit to Install limitations/requirements in Title V permits

---

The Division of Air Pollution Control has recently fielded many questions concerning the proper location of PTI limitations/ requirements within Title V permits. The purpose of this memo is to clarify which Permit to Install limitations/requirements belong on the federal side of a Title V permit and which limitations/requirements belong on the state side of a Title V permit.

In the past it was thought that all PTI limitations/requirements from permits issued as draft must go on the federal side of the Title V permits. We no longer believe this is true. Instead, you should use the following rules when deciding the location of PTI limitations/requirements.

A. The following PTI limitations/requirements <u>and all associated terms and conditions</u> (monitoring, recordkeeping, reporting, and testing) must go on the federal side of a Title V permit.

1. New Source Performance Standards (NSPS)

2. National Emission Standard for Hazardous Pollutants (NESHAP).

3. Maximum Achievable Control Technology (MACT) standards.

4. Short term emission limits (lb/hr, lb/day, lb/month, lb/rolling 12-month, lb/rolling 365 day, lb/gallon, etc.) developed to restrict the potential to emit for synthetic minors.

5. Short term operational restrictions (gallons/hr, gallons/day, gallons/month, gallons/rolling 12-month, gallons/rolling 365-day, etc.) developed to restrict the potential to emit for synthetic minors.

6. Emission limits (other than (B)(1) below) specified in or derived from rules in the federally approved State Implementation Plan (SIP).

7. Emission limits or control requirements specified to comply with Best Available Control Technology (BACT) requirements for Prevention of Significant Deterioration (PSD).

8. Emission limits or control requirements specified to comply with Lowest Achievable Emission Rate (LAER) requirements.

9. Emission limitations, operational restrictions or shutdown requirements for emissions units that are reducing emissions for netting purposes.

10. Ambient monitoring terms required by one of the above-mentioned regulations.

11. Emissions limitations, control requirements or operational restrictions for an emissions unit that have been developed specifically to prevent a violation of the National Ambient Air Quality Standards by that emissions unit.

B. PTI limitations/requirements not listed above should be placed on the State Enforceable side of Title V permits, including:

1. Any limitation developed to comply with Best Available Technology (BAT) requirements.

2. Any ton/year emission limitation.

3. Any limitation based upon the application of the DAPC's "Air Toxic Policy."

If you have any questions, please contact Jim Orlemann or Mike Hopkins.

MH/JO/ \ioc\limit1.wpd

Distribution:

All DO/LAA Air Unit Supervisors
All DAPC Section Managers
Jenny Tiell, Dir. Office
Safaa El-Oraby, DAPC
Jeanne Mallett, Legal
Misty Parsons, DAPC
Alan Lloyd, DAPC

OEPA inter-office communication

to: Distribution date: February 2, 1994

from: Mike Hopkins, AQM&P and Clara Dailey, PMU

subject: Permitting of sources under PTI Registration status

After receiving the first Registration PTI worksheets, we have found that there are a few areas that need clarification. We want to provide you with further guidance on how to determine if a source qualifies for Registration status, as well as how the worksheet should be submitted to Central Office.

Several important things to consider when Registration is requested are:

The source must emit less than 5 tons/year of uncontrolled, potential emissions to qualify for Registration. A source can have control and receive Registration, but we must still decide on the basis of the uncontrolled emission rate. This amount is per source, and not per permit. Also, a source can have up to 5 tons of each pollutant, not the total of all pollutants.

No NSPS sources can be placed on Registration status. This includes storage tanks.

NESHAP or hazardous air pollutant sources that USEPA has promulgated a standard for cannot be placed on Registration.

Sources that are installed or that began construction prior to October 8, 1993 cannot be placed on Registration status; this status did not exist at that time, therefore, a PTI is required.

ORC 3745.11(J) states that for sources installed after July 1, 1993, the PTI fee will be doubled to received a permit issued after January 1, 1994. This is for all PTI's and Registration PTI's. Therefore, for sources qualifying for Registration that have been installed (or began construction) after October 8, 1993, but have not received any permit, the fee doubles for those permits issued after January 1, 1994, so please figure the fee appropriately.

There are several things that Central Office needs with the Registration worksheets:

If a source is subject to the Air Toxics Policy, please include a New Source Review Coding Form so that a toxic review can be performed, or send us a copy of the modeling if you do it.

When submitting PTI Registration forms, please include all calculations for controlled and uncontrolled emissions, verifying that the source emits less than 5 tons/year uncontrolled. Also, include a short note as to the source of the numbers used in the calculations. For example, if a number is obtained from a manufacturer, include a note off to the side stating that this number came from the manufacturer. This should be done for all PTI's.

The construction status is important, so make sure that you include the date on the worksheet when construction began, if already started. The installation schedule for each source should be included with the Registration package, just like it should be for a PTI worksheet.

When Registration status is requested, but you determine that a source cannot be placed on a Registration PTI, you should notify the source as soon as possible. We only have 60 days to notify the applicant if Registration is not applicable, and Central Office has received some Registration worksheets that must be full PTI's very close to the 60 day deadline. We want to emphasize that you must review these early on to determine if they qualify for Registration or not.

When we have noticed any registration worksheets submitted that should really be PTI's, we have generally changed the worksheet and processed the paperwork as a PTI, and notified the field office.

There are pollutants (other than VOC, PM, SO2 and NOx) that are not listed in the rule that are emitted alone or in combination with other listed pollutants from a source. Central Office is reviewing the rule to determine if a source should be placed on Registration in these cases, and what the cutoffs should be for these pollutants to allow Registration. For CO, the determination at this time is that if a source emits less than 5 TPY of CO, it can be placed on Registration, otherwise it needs a PTI. Sources emitting ozone are not to be placed on Registration.

And finally, please fill out your forms as expeditiously as possible. Your cooperation is greatly appreciated.

MH/CD/MP/SG

<u>Distribution</u>

Don Cavote, CDO
Doug Seamen, Cleveland
Jerry Garro, Akron
John Paul, RAPCA
Bruce Blankenship, Canton
Dennis Bush, NEDO
Don Walden, Portsmouth
Jim Braun, AQM&P
Misty Parsons, AQM&P
Tom Rigo, F.O.
Judy Zimomra, Cleveland
Fred Klingelhafer, SEDO
Phil Henrichs, SWDO
Gerry Rich, NWDO
Harold Strohmeyer, NOVAA
Barry Burton, Cincinnati
Don Moline, Toledo
Alan Lloyd, AQM&P
Sara Geary, PMU

Ohio Environmental Protection Agency

Prevention of Significant Deterioration

Permit Processing Schedule

The question posed by many entities is "How long does it take to obtain a Prevention of Significant Deterioration (PSD) permit?". The federal PSD regulations allow up to one year for processing a permit, and that amount of time may be needed for very complex or controversial projects. In particular, the need to schedule and hold a public meeting on a permit will add to at least 60 days to the processing time.

In order to provide for equitable treatment among the PSD applicants and allow for more uniform processing, the following schedule has been developed by the Ohio EPA for processing the typical PSD permit. Permits will be processed in the order that a complete application is filed. This schedule relies upon the company responding promptly to request for information and documentation by the Ohio EPA.

Milestone	Projected Time	Total Time (Typical)
1. Facility submits PSD application	0	0
2. Ohio EPA determines completeness of application	30 days	30 days
3. Facility responds to deficiencies	--	45 days
4. Ohio EPA issues draft PSD permit for public comment	45 days after Ohio EPA determines completeness	90 days
5. Public comment period closes	45 days	135 days
6. Facility responds to comments by public/U.S. EPA	--	150 days
7. Ohio EPA issues revised PSD permit	15 days after Ohio EPA receives facility responses	165 days
8. PSD permit becomes effective	30 days	195 days

The processing of New Source Review (Emission Offsets) will follow the same timeline, except step No. 8 is not required.

R. Hodanbosi
August 29, 1988

AIR PERMIT SYSTEM SOURCE
IDENTITY CODES

B BOILER

D DRY CLEANING FACILITY

F FUGITIVE DUST
(TRADITIONAL)

G GASOLINE DISPENSING
FACILITY

J LOADING RACK

K SURFACE COATING

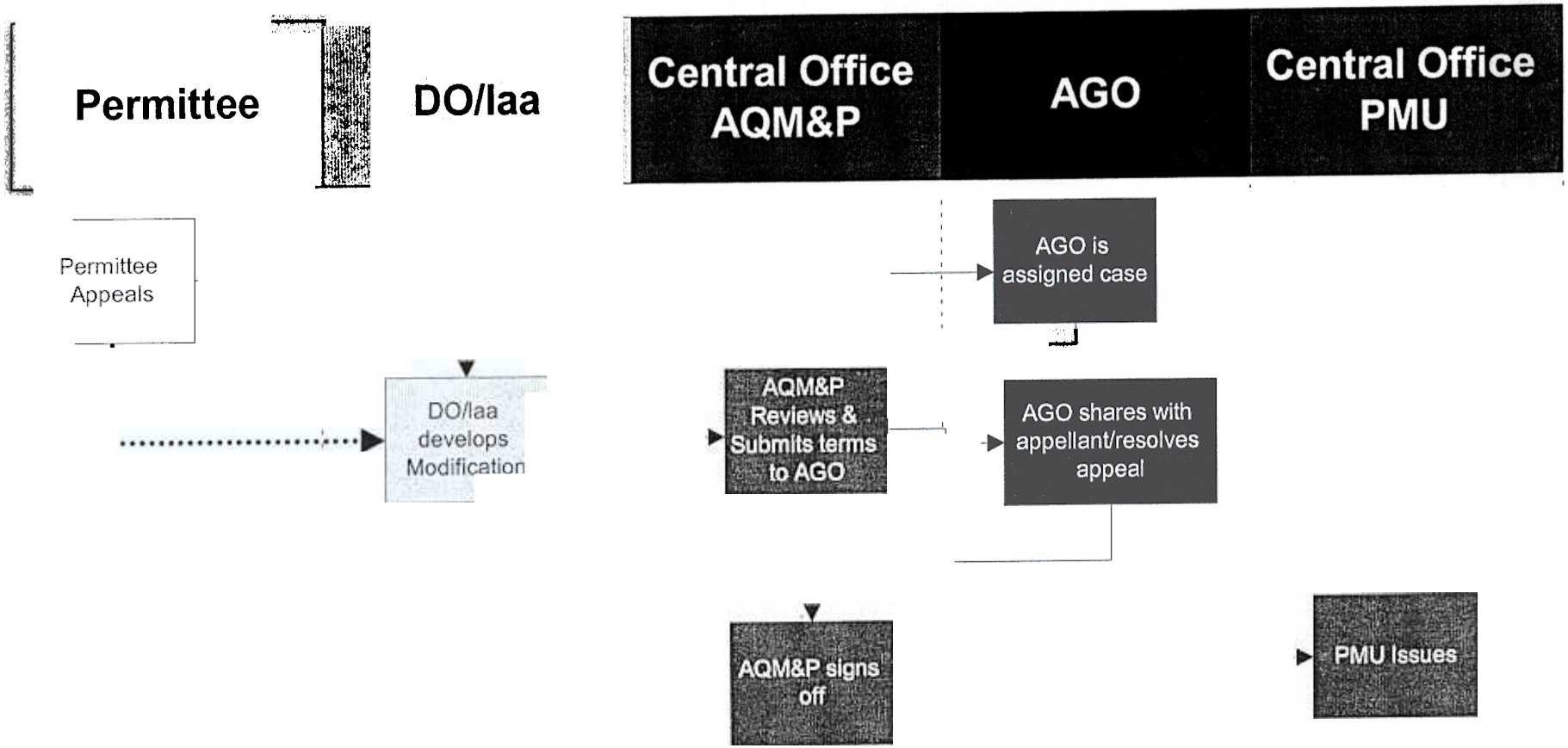
L SOLVENT METAL CLEANING

N INCINERATOR

P PROCESS

R SPRAY BOOTH

T STORAGE TANK


Permittee
DO/laa
Central Office AQM&P
AGO
Central Office PMU
Permittee Appeals
AGO is assigned case
DO/laa develops Modification
AQM&P Reviews & Submits terms to AGO
AGO shares with appellant/resolves appeal
AQM&P signs off
PMU Issues

File NSR MANUAL

OhioEPA

State of Ohio Environmental Protection Agency

STREET ADDRESS: Central District Office MAILING ADDRESS:

TELE: (614) 728-3778 FAX: (614) 728-3898

October 21, 1998

Dave Newsad
Residuals Management Technology, Inc.
5890 Sawmill Road, Suite 100
Dublin, OH 43017-1591

re: clarification on definition of "beginning installation"

Dear Dave:

This letter is in response to your request for clarification on Ohio EPA's policy regarding what constitutes "beginning installation" with regards to permitting.

As you are aware it is difficult to give a policy for an issue such as beginning installation which will cover all situations. For any particular situation, where there is a specific question regarding the Ohio EPA's policy on what constitutes starting installation, the Ohio EPA should be contacted. In general, the following are the current policies of the Ohio EPA.

The first situation to be discussed is the installation of new air contaminant sources in an existing building. It is the general policy of the Ohio EPA that such activities as planning order of equipment and materials, site-clearing, grading, and on-site storage of equipment and materials are allowed before receipt of the permit to install and they do not constitute "beginning installation". Based on some conversations that we had about a year ago, I understand there you also had some specific questions regarding site preparation. For instance, can old duct-work, piping, and similar such infrastructure of the building be removed before receiving the permit to install? In general it is the policy of the Ohio EPA that these activities are considered site-preparation and can be undertaken.

Regarding storage of equipment on-site, the Ohio EPA may consider placing an emissions unit in its final location in a building as beginning installation. For instance, if a boiler is placed in its final location inside of a building, this would probably be considered beginning installation and would require that the permit to install be issued before such activity occurred.

In regards to a new building, the planning, ordering of equipment and materials, site-clearing, grading, and on-site storage of equipment and materials are allowed before the receipt of the permit to install. However, the construction of the building itself could not begin before receipt of the PTI.

Note that the above general guidance describes Ohio EPA interpretations of the Ohio EPA rules and guidances. As you are aware, USEPA has considered entering into a binding contract as an action that is considered starting construction for major sources. The Ohio EPA has not seen any recent enforcement by the the USEPA concerning this issue, but that does not mean USEPA would not choose to enforce this policy in the future.

As stated earlier, these are only guidelines. For specific situations, the Ohio EPA should be contacted for a determination regarding that particular situation.

Sincerely,

Isaac A. Robinson, III
District Air Unit Manager
Central District Office

xc: Mike Hopkins, Central Office-DAPC
Bruce Colman, CDO
Mike Riggleman, CDO
César Zapata, CDO

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George V. Voinovich
Governor
Donald R. Schregardus
Director

MEMORANDUM

To: Jim Orlemann, Engineering Steering Committee

From: Don Cavotel DAPC, CDO

Subject: Operation of new sources subsequent to a PTI issuance

Date: February 2, 1993

As you know, DAPC recently initiated an installation certification process as part of the PTI process for any new air pollution source

In the process of implementing this process and following the procedure of not issuing PTOs until source installation certification has been completed CDO has received concerns/complaints from industry about delaying PTO issuance pending the source installation certification.

Typically, once the source installation certification has been received it takes thirty (30) to sixty (60) days to complete the application review, draft a PTO and have the PTO reviewed and issued by DAPC.

The delay in PTO issuance can result in significant delays in start-up of production on the source pending issuance of the PTO. CDO has been told by companies that this process puts their facility at a significant competitive disadvantage to other companies which do not comply with the regulation and for which Ohio EPA does not enforce the rule. In addition, if DAPC returns the draft PTO to the district due to some unacceptable term of the PTO than the issuance of the PTO is delayed even further.

CDO staff know of no legal mechanism for new sources to operate without a PTO unless compliance testing is required in the PTI and the ninety (90) day period to operate is granted pursuant to OAC 3745-35-02(C)(4)(b).

It is our understanding the allowance of the ninety (90) day operating period in the PTI can only be legally granted if a source is explicitly required to conduct emission and/or emission control equipment performance testing in the PTI.

In discussing this issue among CDO staff it appears in the past the requirement to delay start-up of new sources pending issuance of the PTO has been inconsistently enforced and permits to install have been "illegally" issued with the allowance for a ninety day operating period in the PTI (without the requirement to test the source) by CDO staff. We also suspect inconsistency in enforcing this requirement occurs in other DOs/LAAs.

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In conclusion, in cases where a complete PTO application is submitted and all requirements of the PTI have been complied with, it appears reasonable to us and worth the time and effort for a legal mechanism (i.e. rule change, if necessary) be instituted to allow legal operation of the source pending processing of the paperwork (i.e. PTO).

Considering the workload and resources in CDO we do not believe it is possible to significantly reduce the time it takes to review and process PTOs for new sources as the PTO system currently is set up.

We also believe the allowance of the operation of these sources, contingent upon submittal of complete applications and the facility complying with all PTI requirements, would meet the program goals of DAPC which is "To protect the health of the people of Ohio from air pollution in the most cost efficient method possible for our businesses.." as well as meet the needs of industry.

Some CDO air permit review staff would like to volunteer their assistance in developing and adopting changes to the permitting system and would like to meet with you, and any other DAPC staff interested, in the near future to discuss the possibility of implementing improvements to increase the efficiency of the permitting process.

If you have any questions, contact me directly

DC/DN/dn/sc

cc: Bob Hodanbosi, DAPC, CO
Vaughn Laughlin, DAPC, CDO
Mike Hopkins, DAPC, CDO ✓
Chris Bulinski, DAPC, CDO
Chad Delbecq, DAPC, CDO
Dave Burroughs, DAPC, CDO
Dave Newsad, DAPC, CDO
Brad Thomas, DAPC, CDO

office communication

to: DO Unit Supervisors/LAA Directors date: Nov. 17, 1988

from: Bob Hodanbosi, Division of Air Pollution Control

subject: Changes to the Conditions in Permits to Install (PTI's)

The question has been raised as to the proper procedure for sources to follow after a PTI has been issued for a source, but prior to start-up. According to the current Permit to Operate (PTO) rules [Ohio Administrative Code (OAC) Rule 3745-35], a new source is in violation of these rules if, upon start-up, it operates without a PTO. The problem seems to be an inherent conflict with the way the rules are written. The conflict first appears in OAC Rule 3745-35-02(A) where it essentially states that an air contaminant source may not operate without a PTO. Then, in OAC Rule 3745-35-02(C)(4)(b), it states that a source cannot obtain a permit without first demonstrating through performance tests that it can operate within the limits of the PTI. The rule further states that the testing must be completed within 90 days of start-up. Consequently, a source must operate without a permit during the time the performance testing must be completed.

In order to clarify this situation, a provision will be added to Standard Condition No. 8 of the PTI worksheet that permit the source to operate for a 90-day start-up period. This provision will appear in the ~~the~~ Performance Test Condition as follows:

> "The facility will be permitted to operate during a 90-day period in accordance with OAC Rule 3745-35-02(C)(4)(b). The purpose of this period of operation is to fulfill the performance tests conditions used in the determination of compliance with the provisions of this Permit to Install."

If you have any questions, please do not hesitate to contact me at (614) 644-2270.

BH:jlc

cc: Bill Hayes, Legal
Jim Orlemann, Engineering
Clara Dailey, A&C

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NOV 17 1988
Ohio Environmental Protection Agency
CENTRAL DISTRICT OFFICE

County of Hamilton

SOUTHWESTERN OHIO AIR POLLUTION CONTROL AGENCY

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Thomas W. Wen
Administrator
CHARLES E. SCHUMANN
Director

April 6, 1987

Mr. David Lu,
Environmental Engineer
General Electric, AEBG
1 Neumann Way, Mail Drop N123
Cincinnati, Ohio 45215

RE: OEPA Permit to Install Regulation

Dear Dave:

The purpose of this letter is to provide an interpretation of Ohio Administrative Code (OAC) rule 3745-31 "Permit to Install New Sources of Pollution". Specifically, you requested an interpretation on what phase of a new project could be accomplished prior to obtaining a permit to install from the director of Ohio EPA.

The key provisions of OAC rule 3745-31 are the definitions of the terms "installation" and "new source" in OAC 3745-31-01, and the wording of paragraph (A) of section 3745-31-02. The definitions are as follows:

> "Install" or "installation" means to construct, erect, locate or affix any air contaminant source or any treatment works.
>
> "New source" means any air contaminant source and/or source for which an owner or operator undertakes a continuing program of installation or modification or enters into a binding contractual obligation to undertake and complete, within a reasonable time, a continuing program of installation or modification, after January 1, 1974.

OAC 3745-31-02(A) reads as follows:

> Except as provided in rule 3745-31-03 of the Administrative Code, no person shall cause, permit, or allow the installation of a new source of air pollutants or a new disposal system as defined in division (G) of section 6111.01 of the Revised Code, or cause, permit, or allow the modification of an air contaminant source or a disposal system, or establish or modify a solid waste disposal facilitiy, without first obtaining a permit to install from the director. With regard to disposal systems as defined in division (G) of section 6111.01 of the Revised Code, application for a permit to install shall include plans for the disposal system, and issuance of a permit to install shall constitute approval of plans for the disposal system pursuant to sections 6111.44 and 6111.45 of the Revised Code.

Mr. David Lu
General Electric, AEBG
Page -2-

> INSERT

Based on the above wording, a violation of OAC rule 3745-31-02 occurs when actual physical construction of a new source of air contaminants, or actual physical modification of an existing source of air contaminants, occurs before a permit to install has been issued. Any activities prior to actual installation, such as entering into a contract to purchase a piece of equipment, or entering into a contract to install a piece of equipment, are allowed to be completed prior to having a permit to install. These activities make the source a new source by definition, but do not constitute installation of the new source.

We strongly encourage all owners or operators to submit the necessary applications well in advance of the planned installation date. A certain amount of time is necessary for reviewing an application and issuing a permit. Until a permit to install has been issued, any actions taken by the applicant would carry a certain amount of risk. For instance, if a company purchases an air contaminant source prior to obtaining a permit, they face a chance that the Ohio EPA will not approve the installation of the source, or will require significant modification or additional expenditures for add-on air pollution control equipment. Therefore, submittal of an application for a permit to install at the earliest possible time is prudent.

Please note that this letter addresses the Ohio Permit to Install requirements only, and that certain Federal regulations may contain different definitions or applicability requirements.

If you have any questions, or would like to discuss the contents of this letter in further detail, please call me at (513) 251-8777.

Sincerely,

Thomas N. Tucker

Thomas N. Tucker,
Environmental Scientist

TNT/jr

Inter-Office Communication

to: Thomas Tucker, SWOAPCA date: April 1, 1987

from: Bob Hodanbosi, DAPC

subject: Definition of Installation

RECEIVED S/W/O AIR POLLUTION CONTROL
APR 3 1987

INSERT

I have had an opportunity to review your draft letter concerning "installation" under the Ohio EPA Permit to Install rules. In general, I agree with the content of the letter. When we discuss the construction of a new facility with an entity, we define "installation" as the pouring of foundation for the construction of the building that contains the source. We have allowed the construction of office buildings associated with a new facility before permit issuance.

Please call if you have any questions.

BH/jlc

EN 1001 (3/84)

Definition of "Start of Construction"

The following is intended to define OEPA's policy on what is the start of construction for permit to install purposes;

For a new green field facility, start of construction is when the entity begins pouring concrete for the foundations for the structure.

For an addition to an existing facility, start of construction is when the entity starts pouring concrete for the foundation for the building expansion or for the foundation for any new equipment.

For an addition to an existing facility in which no substantial building modifications (foundations) are necessary, start of construction is when the entity receives new equipment at the facility.

An entity can feel free to do any site preparation work that is necessary up to the point as identified above. A PTI must be issued prior to starting construction.

PTI Exemptions

A completed exemptions package is undergoing final review. Hope to propose rules soon and have tentatively scheduled a hearing date for late June. This is for the first group of sources.

Respectfully Submitted
James W. Sumner
Secretary Pro Tem

County of Hamilton

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SOUTHWESTERN OHIO AIR POLLUTION CONTROL AGENCY
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JUN 3 1992

Bob: Is this still current? If so, I'll distribute. (Anthony Sullivan is Pat for policy - this is all anyone found). Thanks. Matt

OK

Telecopier Cover Letter

PLEASE DELIVER THE FOLLOWING TELECOPIED PAGE(S) TO:

NAME: PAT WALLING-MILLER

COMPANY: OEPA: DAPC

FAX #:

TOTAL # OF PAGES INCLUDING COVER SHEET: 5

DATE: 4-9-92

SENDER: Jim Sadelfeld - SWOAPCA

If you do not receive all of the pages and/or any problems arise please call ASAP at (513) 651-9437

Our Facsimile Number is (513) 651-9528

Comments:

Pat, here is the info on new construction. The issue was initiated by Dark Lee when he was at G.E. Attached is our letter to him followed by an IAC from Bob followed by minutes from a NSR committee meeting minutes. Let me know if you need anything else

Jim

through application of the best technological system of continuous emission reduction which (taking into consideration the cost of achieving such emission reduction, any nonair quality health and environmental impact and energy requirements) the Administrator determines has been adequately demonstrated . . . [section 111(a)(1)].

B. Regulatory Background

1. Implementation of Particulate Matter Standards

a. *Section 110 State Implementation Plans.* Since 1971 EPA has promulgated, in 40 CFR Part 51, regulations covering a wide range of the planning requirements set forth by section 110. On November 7, 1986 EPA promulgated (51 FR 40658) restructured Part 51 regulations. References to Part 51 in this notice are to the recodified sections.

b. *Part D State Implementation Plans.* (1) *Section 107(d) designations.* The EPA promulgated attainment status designations for particulate matter and four other NAAQS on March 3, 1978, in 40 CFR Part 81 Subpart C (43 FR 8962).

In the preamble of this action, EPA pointed out that it had designated some rural areas "attainment" or "unclassifiable" for particulate matter despite data showing that these areas were experiencing violations of the particulate matter NAAQS (43 FR 8963). Under its Fugitive Dust Policy, EPA defined as "rural" any area with low population that lacked major industrial development or major industrial particulate matter emissions. In the absence of evidence to the contrary, EPA at that time presumed rural dust to be less harmful than urban dust because it consisted primarily of natural materials not contaminated by industrial products.

The EPA also promulgated a rule explaining that it could redesignate areas when air quality data showed that a change was warranted. See 40 CFR 81.300.[3]

(2) *Guidance for Part D State Implementation Plan revision: "RACT plus studies" policy.* The EPA published most of its guidance for SIP's for nonattainment areas in the form of a "general preamble" interpreting the Part D planning requirements (44 FR 20372, April 4, 1979). The EPA generally required States to apply RACT to all stationary sources unless the State could show that controls on a particular source or group of sources would not bring about attainment any faster. Moreover, the States had to submit all needed control measures in fully enforceable form (44 FR 20375). For particulate matter, however, EPA allowed States to postpone the adoption of control measures for "nontraditional" sources until the States had an opportunity to study what control measures would be efficacious (44 FR 20378). "Nontraditional" sources included area or background sources such as vehicle traffic and construction activities. All emissions from industrial processes at stationary sources were subject to the requirement for enforceable RACT measures.

Later, as EPA reviewed specific plan revisions, it expanded this policy to allow States to postpone the submittal of attainment demonstrations for the particulate matter standards until the States had a chance to quantify the effects of controlling nontraditional sources. However, the demonstrations, when submitted, still had to provide for attainment of the primary standards by the end of 1982. Also, EPA required areas that postponed demonstrations to impose RACT measures on all traditional sources, since they would be unable to show that they could attain with less stringent controls.

(3) *New source review rules.* The EPA originally issued guidance on the NSR requirements of section 173 in the general preamble. However, in 1980 EPA promulgated detailed regulations on the content of approvable State programs (45 FR 31304, May 13, 1980 and 45 FR 52678, August 7, 1980), codified at 40 CFR 51.165(a) [formerly 51.18(j)]. Part D and these regulations provide, among other things, that State plans must require major stationary sources and major modifications to offset their proposed emissions and achieve the "lowest achievable emission rate" (LAER).[4]

(4) *Environmental Protection Agency action on Part D plans: construction bans, conditional approvals, and policy for correcting deficient Part D plans.* By July 1, 1979, no nonattainment areas had fully approved SIP's, and very few had SIP provisions in effect that limited construction as required by sections 110(a)(2)(I) and 173(4). Consequently, on July 2, 1979, EPA published a regulation that inserted the section 110(a)(2)(I) and section 173(4) construction bans into all SIP's that lacked them (44 FR 39471, now codified at 40 CFR 52.24). In the same notice, EPA announced that the section 110(a)(2)(I) ban had become effective in each nonattainment area that lacked an approved or promulgated Part D plan revision. The EPA explained that it would remove these bans when it took final action approving or promulgating a plan that met all relevant Part D requirements. The EPA, however, subsequently concluded that the section 110(a)(2)(I) construction ban would not apply if a State lacked a Part D revision for a secondary NAAQS, since section 110(b) allows States to obtain extensions for submitting secondary plans and the legislative history of Part D shows Congress' chief concern was the protection of human health (47 FR 44729, October 12, 1982).

Many nonattainment areas failed to attain the primary standards by the end of 1982. The EPA has interpreted the Act, however, as not requiring the Agency to impose the full array of available sanctions immediately in all of these areas. Instead, on November 2, 1983, EPA announced that it would find plans for areas that failed to attain to be "inadequate" under section 110(a)(2)(H) and 110(c)(1)(C) (48 FR 50686). The EPA would require States to submit revisions for these areas and, if any area failed to comply, EPA would find that the State was not implementing the portion of its SIP that requires revisions in response to a notice under section 110(a)(2)(H). This finding would trigger a construction ban under section 173(4) and funding restrictions under section 176(b).

The EPA acknowledged in its November 1983 notice that it was considering a revision to the particulate matter standard (48 FR 50697). Consequently, EPA deferred, and is continuing to defer, the issuance of notices of inadequacy for particulate matter plans.

2. Implementation of Prevention of Significant Deterioration Requirements

Prior to the enactment of Part C in 1977, EPA had promulgated Federal PSD regulations as 40 CFR 52.21 in response to court rulings that the 1970 Act required SIP's to include PSD measures. See *Sierra Club* v. *Ruckleshaus*, 344 F. Supp. 253 (D.C. Cir. 1972), aff'd per curiam, 4 ERC 1815 (D.C. Cir. 1972), aff'd by an equally divided court, sub. nom. *Fri* v. *Sierra Club*, 412 U.S. 541 (1973). The EPA inserted the Federal PSD regulations directly into each SIP pursuant to section 110(c) of the Act [39 FR 42510]. In 1978 EPA substantially amended its Federal PSD regulations to conform them to the detailed PSD requirements contained in the 1977 amendments [43 FR 25380 (now codified.

[3] One court has ruled that section 107(d) does not authorize EPA to redesignate areas to nonattainment unless a State concurs in the redesignation. *See Bethlehem Steel Corp. v. EPA*, 726 F.2d 1303 (7th Cir. 1983). No other court has yet decided this issue.

[4] Under regulations recently upheld by the Supreme Court, *Chevron, Inc.* v. *NRDC*, 104 S. Ct. 2778 (1984), EPA defines "major stationary source" for purposes of the nonattainment area NSR program as essentially an entire plant.

OhioEPA
State of Ohio Environmental Protection Agency

STREET ADDRESS: MAILING ADDRESS:

TELE: (614) 644-3020 FAX: (614) 644-2329

All District Offices and Local Air Agencies

From: Mike Hopkins, Manager, Air Quality Modeling and Planning Section, DAPC, Ohio EPA

Draft vs. Direct Final Permits

Date: November 20, 1995

One of the responsibilities of the permit review staff in the District offices or Local Air Agencies is to recommend that either a draft permit to install or a direct final permit to install is issued. This memo is designed to answer the question: When should the field office permit reviewer recommend that a draft permit to install is issued vs. a direct final permit to install?

A draft permit should be issued if any of the following apply:

1) The permit is for a *major stationary source* or a *major modification* under the federal Prevention of Significant Deterioration rules or equivalent state rules,

2) The permit is for a *major stationary source* or a *major modification* under the federal Nonattainment New Source Review rules (offset policy) or equivalent state rules

3) The permit is for a synthetic minor for the purposes of avoiding either (1) or (2) above,

4 The permit is for a National Emissions Standards for Hazardous Air Pollutants (NESHAP) source under 40 CFR 61,

5) The permit is for a Maximum Achievable Control Technology (MACT) source under 40 CFR 63 (except for Drycleaner MACT sources),

6) The permit is for an infectious waste incinerator,

7) The source owner has requested that the permit be issued as a draft to make the limits federally enforceable,

8) The permit is for a source which, in the judgement of the field office staff, is likely to generate significant public comment.

George V. Voinovich, Governor
Nancy P. Hollister, Lt. Governor

If any of the above apply, then a draft permit should be issued.

Note that we no longer require that all NSPS permits go out as draft permits. We used to require this because of language in our contract with USEPA. However, this language has now been changed and the requirement has been dropped.

The same reasoning holds true for permit modifications. If the modification is for a "paper" modification, it can be issued as a direct final. However, if the change is defined as a *modification* under OAC rule 3745-31-01 and one of the above criteria is true, then a draft permit should be issued.

If you have any questions, please call me at 614-644-3611

MH/
policy\draftvsf.wpd

cc: Bob Hodanbosi, DAPC
Alan Franks, Dir. Office
Vaughn Laughlin, Dir. Office
Jeanne Mallett, Legal
Misty Parsons, DAPC
Alan Lloyd, DAPC
Clara Dailey, DAPC
Sara Geary, DAPC

OEPA inter-office communication

to: Distribution date: February 24, 1994

from: Misty Parsons, mp AQM&P and Clara cd Dailey, PMU

subject: Field office PTI recommendations for issuance as draft or final

We have recently been asked to improve our efforts in determining whether each PTI we review at Central Office should be issued as a preliminary (draft) or as a direct final.

As you know, we routinely issue permits for NSPS, NESHAP, Synthetic Minor, Netting, Offset, PSD and certain known controversial types of sources (for example thermal soil units) as drafts. Permits for any particular source that the agency knows is controversial, and permits that the applicant wants issued as a draft, are also generally issued as drafts.

Often, only the field office staff is aware of a company's preference or that a source is controversial. Therefore, we are asking you to pay particular attention to the Preliminary and Final blanks at the top of the standard terms and conditions page, which you submit with every worksheet. These blanks are your instructions to us as to how the permit is to be issued (the Preliminary blank is not to be used to indicate that your review is the preliminary review). If you check the Preliminary blank, and the source is not one of those normally issued as draft, we will generally issue it as a draft, knowing that there is a reason that you want it as a draft, such as public interest. If you check Final on the form and we concur, a direct final permit will be issued as usual.

In general, we don't want to issue any more permits as drafts than is necessary, since final permits are not issued as quickly as direct finals. In addition, it has been decided that dry cleaner MACT PTI's will be issued as direct finals.

Please make sure that all staff preparing PTI's at your office are aware of this procedure. The Central Office staff will make every effort to issue the PTI's according to the indication you provide on the worksheets. Thank you for your assistance. If you have any questions, please contact us.

Distribution

Don Cavote, CDO
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Sara Geary, PMU

inter-office communicatior

to: Warren Tyler, Director & Virginia Aveni, Deputy Director date: August 21, 1986

from: Pat Walling, Chief, DAPC PW/BH

subject: Direct Final Action for Air Permits to Install (PTI's)

The Division of Air Pollution Control has evaluated various approaches to expedite the processing of air PTI's. The first step that we are taking is to begin to issue insignificant or minor air PTI's as "direct final" actions that will be effective upon issuance. This will reduce total processing time by approximately 60 days for these minor sources. Major or controversial PTI's will still be issued as "draft" to obtain public comment prior to the issuance of a final PTI.

Attached for your information is a copy of the public notice that will appear in the Weekly Review that announces this change in permit processing.

If you have any questions, please contact Bob Hodanbosi or me at 466-6116.

BH/jlc

Attachment

cc: District Office Air Unit Supervisors
Local Air Agency Directors
Ohio EPA Division Chiefs
DAPC Section Managers
Air PAG Subcommittee
Steve Grossman
Paul Flanigan
Alan Lapp
Mike Greenberg
Larry Frimerman
Oakley Kelch
Al Franks
Vivian Davis
Clara Dailey
Air Lines

OHIO EPA POLICY ANNOUNCEMENT

Background

The Agency has been involved in a cooperative effort this past year with the Air Public Advisory Group to develop an expedited approach for the processing of air Permits to Install (PTI's). One method available to the Agency would be to issue air PTI's as "final actions" instead of draft actions. This action would substantially reduce processing time as approximately 6 to 8 weeks would be eliminated. This procedure would be accomplished by identifying small sources that have minor environmental impact and issuing these PTI's as final actions, thereby eliminating the draft permit step. Major installations or sources governed by a federal Clean Air Act regulation will be issued as a "draft" permit before a final permit is issued in the manner now used by Ohio EPA.

In order to ensure adequate public participation, the receipt of all PTI applications will be advertised, as will the issuance of the final permit. This is the current practice of the Agency. In the case of "draft" actions, this issuance of the draft action will also be advertised. All final actions of the Director will remain appealable to the Environmental Board of Review (EBR) within 30 days of public notice.

Policy

Beginning August 1, 1986, the following categories of sources will be ssued as draft and then final PTI's:

1. Sources governed by the New Source Performance Standards (NSPS)
2. Sources governed by the National Emission Standards for Hazardous Air Pollutants (NESHAP)
3. Sources governed by the Prevention of Significant Deterioration (PSD) rules
4. Emission Offset Sources
5. Any other source that is considered a "major" under the Clean Air Act.
6. Any source that, in the opinion of the Director, is of significant public interest to warrant the opportunity for public hearing and/or public comments.

All other PTI's will be issued as "direct final actions" of the Director.

If you have any questions concerning this announcement, please contact Patricia Walling or Robert Hodanbosi, the Division of Air Pollution Control, at (614) 466-6116.

Ohio EPA
Division of Air Pollution Control

inter-office communication

to: New Source Review Contacts

from: Michael Hopkins, AQM&P

subject: Existing sources with no PTI

date: ~~March 18, 1998~~

We have had numerous inquiries concerning requirements for existing sources installed after January 1, 1974 which never obtained a PTI. The Title V process has uncovered many of these sources.

The basic rule we have tried to follow is that the source should meet the requirements that were in place at the time the source was installed. This would include the technology review (BAT) as well as the modeling and toxic reviews. We have found, though, that these dates are not always known or have not been passed on. In some instances, we are looking for the earliest reference to a requirement (i.e., the earliest Hodanbosi memo or letter identifying a requirement).

We are also currently creating a BAT database which will go back approximately three years. For sources installed prior to that, we will have to use our best engineering judgement.

To assist you in identifying the requirements in place at any point in time, we are attempting to reconstruct as many of the milestone dates as possible. Examples of the significant dates we are attempting to identify are:

January 1, 1974	PTI rules adopted, PTI required
April 9, 1981	State modeling thresholds identified
January 9, 1984 (approx)	Option A toxics policy
October 17, 1988	PSD increments for NOx added
June 3, 1993	PM10 increments replace TSP

The attached list of PSD rules changes points out that there have been many rules changes that may affect the requirements a source may have been subject to at any point in time. There have also been numerous revisions to state PTI rules as well as changes to VOC, SO2 and particulate requirements which may have affected BAT for a given PTI. These would be too numerous to list, but there may be examples that have played a role in your review of existing sources. Please note any significant milestones you believe should be included on a list of significant dates and contact Bill Spires at 614-644-3618 or at bill.spires@epa.state.oh.us.

Ohio EPA
Division of Air Pollution Control

inter-office communication

to: New Source Review Contacts

from: Michael Hopkins, AQM&P

subject: Existing sources with no PTI

date: July 17, 1997

Redone

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PSD Rules Evolution

The Prevention of Significant Deterioration (PSD) rules originated from a lawsuit over one of the Clean Air Act (CAA) goals, i.e., to "protect and enhance" the quality of the nation's air. The PSD regulations, applicable to new and modified major stationary sources of air pollution, first appeared in final form on December 5, 1974.

The two main goals of this program were to: 1) create "classes" of allowable incremental increases in sulfur dioxide and total suspended particulate matter (TSP) concentrations (PSD Class I, II, and III increments), and 2) establish a New Source Review (NSR) program that would require a source to: demonstrate that it would not violate PSD increments; apply state-of-the-art controls — Best Available Control Technology (BACT); and undergo public review.

Versions of the rules surfaced in two sections of the Code of Federal Regulations (CFR). Part 52 contained PSD rules for programs run by EPA or states receiving PSD delegation. Part 51 defined requirements for states to develop their own PSD rules and programs. Over the years, the rules have gone through several revisions due to lawsuits and changes to the CAA. This chart presents a chronology of changes to the PSD regulations as they appeared in the *Federal Register*. Since the PSD rules in 40 CFR Parts 51 and 52 went through a similar evolution, only the changes to Part 52 are shown.

12/5/74	39 FR 42510-42517	The first set of PSD rules applied to sulfur oxides or particulate matter emissions from a list of 18 source categories. New or modified stationary sources that had not commenced construction prior to 6/1/75 were required to obtain a PSD permit.
11/3/77	42 FR 57459-57462	Changes to the 12/5/74 PSD rules were required by the 1977 Clean Air Act (CAA) amendments (signed 8/7/77). Key changes included new mandatory Class I areas (e.g., national parks), more restrictive Class II and III increments, and requirements to show compliance with the National Ambient Air Quality Standards (NAAQS). These rules applied to sources that commenced construction on or after 8/7/77.
6/19/78	43 FR 26380-26410	This set of rules replaced the 12/5/74 PSD rules (as amended) and implemented the remaining new requirements of the 1977 CAA amendments, including collection of up to a year of ambient monitoring data for any PSD permit application submitted after 8/7/78. (However, dispersion modeling was often accepted in place of monitoring data.) The list of covered sources expanded to 28 categories. PSD permits were required for any listed source with potential emissions increases of 100 tons per year or more of *any pollutant* regulated under the CAA. Sources not on the list but with potential emissions increases of 250 or more tons per year were also required to obtain a PSD permit. Potential emissions were defined *before* application of controls. Sources that obtained preconstruction permits before 3/1/78 and commenced construction before 3/19/79 were exempt from the 6/19/78 rules.
5/10/79	44 FR 27558-27604	Reference to the quality assurance requirements for collecting PSD ambient air monitoring data (Appendix B of Part 58) was incorporated into §52.21(n).
8/7/80	45 FR 52676-52748	As a result of the *Alabama Power* court decision on the 1978 rules, the PSD regulations were substantially rewritten. *The 8/7/80 rules form the basis of the current program.* "Potential emissions" were redefined and based on maximum capacity taking into account any *federally enforceable* physical and operational limits (such as pollution control equipment). The list of 28 source categories and the 100/250 ton per year thresholds for defining new "major" sources remained. The same thresholds applied to modifications of "minor" sources. Lower, "significant" thresholds for individual pollutants were established for modifications of major sources. Stringent preconstruction monitoring requirements were added (i.e., modeling data could be substituted only under limited conditions). PSD permits required by the 6/19/78 rules but not by the 8/7/80 rules could be rescinded, and numerous transition dates were specified for various new requirements (e.g., applicability, BACT, monitoring).

PSD Rules Evolution (cont.)

6/25/82	47 FR 27554-27562	An EPA interpretation in the 8/7/80 rules was changed by deleting requirements to: 1) include vessel emissions when determining if a new source or modification was significant or major and 2) include mobile source emissions as secondary emissions when assessing air quality impacts of new/modified sources.
10/26/84	49 FR 43202-43216	EPA reaffirmed the current requirement to include fugitive emissions from listed source categories when determining if a source is major for NSR.
7/12/85	50 FR 28544-28553	Additional requirements to address adverse impacts on visibility in Class I areas were listed.
11/7/86	51 FR 40656-40677	References to sections of Part 51 were changed to reflect restructuring and consolidation of Part 51.
7/1/87	52 FR 24634-24723	EPA replaced the particulate matter NAAQS with the PM_{10} NAAQS, and §52.21 was updated with a PM_{10} significant net emissions increase and preconstruction monitoring significance level. Changes were also made to the monitoring significance levels for lead, beryllium, and hydrogen sulfide.
7/14/87	52 FR 26401-26402	Corrections were made to the 7/1/87 PM_{10} rules.
1/6/88	53 FR 392-396	Supplement A to the *Guideline on Air Quality Models (Revised)* was incorporated.
10/17/88	53 FR 40656-40672	PSD increments were defined for nitrogen oxides.
6/28/89	54 FR 27274-27300	"Federal enforceability" guidance was reaffirmed and amended to specify conditions that allow state operating permits to be federally enforceable. Other parts of the PSD rules were also reaffirmed. Requirements for the innovative technology waiver in relation to Class I areas were relaxed. The definition of Volatile Organic Compounds (VOC) was revised to exclude certain negligibly photochemically reactive compounds.
2/11/91	56 FR 5488-5527	Significant net emissions increases were defined for regulated air pollutants added by the Municipal Waste Combustors New Source Performance Standard.
2/3/92	57 FR 3941-3946	The VOC definition was changed to refer to §51.100(s) where VOC was redefined to exclude additional negligibly photochemically reactive compounds.
7/21/92	57 FR 32314-32339	A broad NSR exclusion for utility pollution control projects was added (in part due to the *WEPCO* and *Puerto Rican Cement* court decisions).
6/3/93	58 FR 31622-31638	EPA replaced the particulate matter PSD increments with PM_{10} PSD increments, and portions of §52.21 were updated accordingly.
7/20/93	58 FR 38816-38884	The reference to the modeling guideline was changed to Appendix W of Part 51, and Supplement B to the *Guideline on Air Quality Models (Revised)* was incorporated.
8/9/95	60 FR 40465-40474	Supplement C to the *Guideline on Air Quality Models (Revised)* was incorporated.

Trinity's *History of PSD Rules* is an historical reference of *Federal Register* notices on final PSD rules (as defined in §52.21) from December 1974 to present. Preambles to the final rules are included. To purchase a copy, call our Education Department at (214) 661-8100.

Ohio EPA
Division of Air Pollution Control

inter-office communication

to:	**Air Permit To Install Permit Writers and Permit Supervisors**
from:	**Michael W. Ahern Environmental Supervisor, DAPC/PMU**
subject:	**Corrected Copy Processing Guidance - (via e-mail and posted on PTIs2000)**
date:	**March 23, 2001**

No fee will be charged for corrected copies; corrected copies are not actions of the Director. If a fee must be charged for a change to a permit document, it must be completed as a modification in PTIs2000 as an action of the Director.

DO/laa Guidance

I. Corrected Copy Requests must be entered into PTIs2000 as a new record using the following steps:

A. Log into PTIs2000
B. Choose Facility / Permit Information
C. Enter the facility ID
D. Confirm or change the Contact information
E. Describe the corrections in the PTI description and Submit
F. Choose **To enter a brand new PTI application, click on the NEW button**

New

G. Enter the same PTI number as the issued permit with a new receive date.
H. Describe the nature of the correction in the PTI description (Note, this will be used in the cover letter of the corrected copy)
I. Change or confirm the mailing contact information
J. Submit basic PTI information.
K. Exit to Main Menu
L. Choose Emission Unit(s) & Permit Designation
M. Choose Option 2
N. Choose the old PTI receive date and the new PTI receive date.
O. Confirm all the PTI and Permit designation information (this will bring you back to the main menu)
P. Choose PTI Task List
Q. Enter the PTI number
R. Choose the corrected copy receive date
S. Complete the tasks up to task 09.
T. To complete task 09, choose the "Corrected Copy" option from the pick list:

Task 9: DO/LAA staff selects permit type.

Permit Type: Application Received

Is a permit needed? ☑ **Yes** ☐ **No**

Select: Permit Type

- Permit Type
- Draft State Only
- Draft State-Fed
- Draft Denial
- Direct Final State Only
- Direct Final State-Fed
- Registration
- Corrected Copy

U. Complete Task 10 - Submit recommendation to Supervisor

V. Supervisors, complete task 12 and assign the corrected copy to Mike Ahern, DAPC PMU

W Identify in the comments area of PTIs2000 what must be corrected in the document with sufficient detail for (even) Mike Ahern to be able to use as directions for creating the corrected copy from the issued PMU document to the PMU Supervisor (Mike Ahern).

II. Please contact the PMU Supervisor (Mike Ahern) first if the permit was issued prior to January 1998 (this should be extremely rare).

III. If the corrections are significant (meaning they are to numerous or complicated to be understood by the central office), obtain a copy of the prior issued electronic permit, make changes to the document using ***bold italics*** for added text and ~~strikeout~~ text for text that is to be removed. Save the file as **ptinumbercor1.wpd** Note: the 1 indicates the corrected copy iteration of the document, so if a second correction is required, it would be saved as **ptinumbercor2.wpd**. E-mail the file to the airpti@epa.state.oh.us e-mail address and indicate in the comments section of PTIs2000 that an electronic file is available for the central office to process.

PMU Guidance

I. The PMU Supervisor will review/confirm the request to determine if it can be accomplished as a corrected copy or if a modification must be processed in PTIs2000 and will assign the request to the AQM&P OAIII to develop the corrected copy by forwarding the e-mail from the DO/laa Supervisor.

II. The OAIII will create the corrected copy

A. The OAIII will sign-out the file from the PTI file room

B. The OAIII will open the issued permit document from the j:\fops\pti\issued\archive directory and resave the permit into the current year archive directory as **ptinumbercor1.wpd** Note: the 1 indicates the corrected copy iteration of the document, so if a second correction is required, it would be saved as **ptinumbercor2.wpd**.

C. The OAIII will identify on the original "Rigo Signature" page that the permit was corrected by indicating **"Corrected Copy: DATE"**, make the corrections as necessary, and use the highlight function in WP to indicate the areas in the document that were affected by the correction.

1. Adding highlighting is accomplished by selecting the area or text, right clicking the mouse, and choosing "highlight).

D. The OAIII will insert the Corrected copy cover letter at the top of the document by running the

"Corrected Copy Cover Page" macro.

E. The OAIII will copy the cc list from the original "Rigo" signature page to the inserted "Rigo" signature page. Note: actual mailing addresses for "outside" cc's may need to be obtained

F. After resaving the corrected copy, the OAIII will print the document out, self-proof, stamp the Directors signature page if necessary, and have Tom Rigo sign the Corrected Copy cover page.

III. The OAIII will send an electronic copy of the Corrected Copy to the appropriate DO/laa supervisor.

IV. The Clerk II will attach the mailing labels to the original of the corrected copy, make copies for all Ccs plus one copy for Legal Records..

V. The Clerk II will send the "original" to the Permittee via certified mail; send a copy to each CC via US mail or internal mail as applicable; one copy to Alan Lapp, Legal Records; and place one copy in PTI file prior to returning the file to the PMU file room to be filed.

The processing goal is to complete a corrected copy within two weeks of assignment by the PMU Supervisor.

Ohio EPA
Division of Air Pollution Control

inter-office communication

to: Distribution via e-mail

from: Michael W. Ahern Environmental Supervisor, DAPC/PMU

subject: Update to April 25, 1997 guidance on PTI Modification requirements

date: June 23, 2000

The purpose of this guidance is to update the procedures used to process permit to install modifications. This guidance is intended to replace the "PTI Modifications" memo sent to you on April 25, 1997. Please forward the following updated guidance to all staff who are involved in processing modifications. Further, I would recommend that the permit review supervisor discuss this guidance with their staff to ensure that future modifications are processed in accordance with this guidance.

DAPC officially changed the formatting of PTIs to the "STARS format" as of February 1999. This change effectively ended issuance of new PTIs in the old TELNET format ("Old format") by establishing a permit that was structured using standard general terms and conditions followed by emissions unit specific terms and conditions. The response by the regulated community to-date has been overwhelmingly positive. As a result, many District Office and local air agency permit writers have begun changing permits previously issued in the old format to the STARS format. Additionally, DAPC overhauled the permit processing system to an Intranet-based system (PTIs2000) beginning January 2000. This is cause for reevaluation of the April 1997 guidance concerning processing modifications.

I first want to provide some clarification of the different types of modifications and how they should be processed, prior to going into what should accompany modification requests.

Clarification on the Types of Modifications[1]

There are essentially three types of modifications currently:

Administrative modifications - A modification to a previously issued permit (document) that addresses changes to the permit that are not strictly typographical in nature and that do not meet the definition of a modification to an air contaminant source as defined in Ohio Administrative Code Chapter 31.

Chapter 31 modifications - This type of modification occurs when the change requested is determined to be a "Modification" under OAC rule 3745-31-01. Since it is considered a modification under that rule, the

[1]Please note that a modification is distinguished from a "Corrected Copy". Although a modification can contain corrections, "Corrected Copies" are strictly typographical in nature, are not "Actions of the Director" (i.e., they are not "Public Noticed" and there is no fee for processing), and they do not undergo review of the requested changes from a regulatory perspective. Processing steps for "Corrected Copies" is provided under separate memo.

permittee is required to submit a permit to install application for the change. It is our policy to process this type of application with a new Permit To Install number. Language in the permit should state that the new permit is superceding the previous permit to install issued on the certain date. (In rare instances the existing PTI can just be modified without creating a new PTI. Please discuss this possibility with your NSR contact and PMU prior to taking this approach).

AGO modifications - AGO (Attorney Generals Office) modifications are, strictly speaking, always one of the two types of modifications identified above. The vast majority of AGO modifications will fall under the "Administrative Modification" description and are initiated based on an appeal to the Environmental Review Appeals Commission of the prior final issued PTI. Once the permit modification has been developed for issuance, it must first be approved by the Central Office NSR group and the Attorney General's Office, thus resulting in a procedural distinction as viewed by the Central Office.

Processing Requirements for Modifications

All modifications must be established in PTIs2000. The processing of the *modification must follow the same path as the previously issued permit* (i.e., if the original permit was issued draft/final, the modification must be issued draft/final). If the original permit issuance was prior to the use of PTIs2000, a modification record must be created.

Emissions unit identification in PTIs2000:

Administrative Modifications - *All* emissions units identified in the prior issued permit must be identified in PTIs2000 with emissions unit descriptions identical to what is identified in the prior issued permit (unless a change in the emissions unit description is part of the modification). The fee should be identified as zero for all emissions units that are NOT being modified as part of the administrative modification. The term "Modified" should be added to the emissions unit description for each emissions unit that is being administratively modified.

Chapter 31 Modifications - Only the emissions units being processed under the new PTI number associated with a Chapter 31 modification should be entered into PTIs2000. Fees should be applied consistent with the August 08, 1997 guidance on fee applicability.

NOTE: For either type of modification, the PTI description must contain the prior issue date and PTI number regardless of the type of modification being processed.

Administrative Modifications

Hard copy and/or Electronic Required information
The information that accompanies each one of the modification types identified above depends largely on what is being changed and what type of modification is being processed.

A. NOTE: All modification documents must reflect the five digit PTI number as required in PTIs2000. In addition, all electronic PTI modification documents must conform to the following file naming

convention *ptinumber***mplus** **the iteration of the modification**.wpd (e.g., 0109524**m4**.wpd for the fourth time a modification has been processed). Please note, if you are electronisizng a permit that has previously been modified, name the electronic file with the current iteration of the modification (e.g., if a permit was issued in 1985 and has been modified via a physical cut and paste method two times in the past and you are now modifying it for a third time and taking the opportunity to electronisize the document, name the file as ptinumber**m3**.wpd). The goal is to be able to easily identify the most recent version of the permit by the file name and to reduce the likelihood of overwriting a prior version of the permit.

B. In all cases, you should insert a briefing memo (see attached template) into the beginning of the electronic document, or as a cover page to a hard copy submission with a description of the following ***(Please note: the description is for internal processing purposes and will not appear in the permit or newspaper. This memo should be inserted into the very beginning of the modification document you are recommending. It should <u>not</u> be sent separately)***:

1. Who initiated the modification - The permittee or the Agency

2. A fairly detailed description of the basis for, and nature of the modification (e.g., "correction of emissions unit allowables due to inaccurate original estimates" [*use caution; an increase in allowables under this example may still require re-review of modeling, PSD, etc.*])

3. Whether or not the modification is associated with an Environmental Review Appeals Commission appeal (i.e., AGO Modification).

4. The permit allowable summary by pollutant (if not included in subsequent pages of the terms and conditions document).

C. ***Required materials accompanying the administrative modification request:***
The materials that must accompany the administrative modification request depends largely on the format of the prior and modified permit.

A completed Administrative Modification Briefing memo (see Section B above) and;

2. The Terms and Conditions being modified

   a. **Old format to old format** ***(NOTE: Since you will need to prepare a PTO or Title V permit, it is highly recommended that you use the new PTI format instead of keeping the terms in the old format. However, if timing is critical, use of the old format is acceptable on a case-by-case basis.)***

   The following materials are needed for modification requests that are in the old format:

      i. **(Hard Copy)**

      (a) Indicate in PTIs2000 that you are sending the recommendation via

hard copy (do this by entering a "Comment" into PTIs2000)

(b) A hard copy of the briefing memo (placed on top of all other info)

(c) A clean copy of the previously issued permit - *Single-sided copies only*

(d) A marked up copy of the previously issued permit indicating the changes to be made. Note: these marks must be in red pen and be highlighted to ensure all changes are accurately processed by the PMU (see attached). In addition, notes concerning where added text is to be inserted when the changes are significant would be greatly appreciated.

OR

ii. **(Electronic)**

A ***bold italics*** ~~strikeout~~, version of the electronic issued PTI document (PMU has processed fully electronic permit documents since January, 1998. Please contact Becky Castle for an electronic document if one is not available in your office and was issued after January, 1998)

b. Old format to new format

The following materials are needed when processing a modification from the old format to the new format:

Submission must be entirely electronic for a modification that also includes changing the format of the PTI from the Telnet format to the STARS format. ***HOWEVER***, it is essential to provide the information identified above in the Sections A&B of this memo so that PMU can create the total allowable emissions summary. The permit review by AQM&P will be the at the same level of detail as a new issue permit.

c. New format to new format

The following materials are needed when processing a modification that was initially created in the new format:

Submission must be entirely electronic. ***HOWEVER***, it is essential to provide a detailed description of the changes being made as identified above in Sections A&B of this memo. In addition, it is essential that you identify changes to the text using ***bold italics*** to identify inserted text and to identify text to be removed from the permit using ~~strikeout~~. AQM&P will use this notation to identify the appropriate sections of the permit to review. PMU will clean the permit up prior to issuance by removing the ~~strikeout~~ text and ***bold italics*** codes.

Chapter 31 Modifications

Chapter 31 Modifications **must** be assigned a new PTI number and **must** be processed electronically using PTIs2000 as a new (STARS) permit/structure. ***VERY IMPORTANT: Only the emissions unit(s) meeting the definition of Modification as identified in Chapter 31 should be included in Chapter 31 modifications.*** Please be certain to identify the previously issued PTI number that is being superceded in the PTI modification by identifying it in the PTI description **and** in the emissions unit description (e.g., Terms in this permit supercede those identified in PTI 03-11357 issued 11/22/89). In addition, please be certain the "blue sheet" is part of the terms and conditions document upon recommendation to the Central Office.

I hope this updated guidance will reduce confusion and inconsistency in processing our modifications. Please remember, ***PTIs2000*** has a "comments" field that will allow users to identify PTI specific nuances concerning the development of modifications.

Summary Checklist for you internal use (do not send this page with your recommendations:
The following is a checklist that you can use to ensure your recommendation is processed efficiently.

Modification Checklist				
Description			Admin	31 Mod
PTIs2000 Data Entry Requirements				
	Entered PTI modification into PTIs2000		x	x
	New PTI number assigned			x
	New emission units only			x
	All original emissions units included		x	
	Five digit PTI number used		x	x
	Added "modified" to the emissions unit description		x	
	Draft/Final decision same as original		x	x
	Fee zero for non modified emissions units		x	
Documentation Requirements				
	Briefing memo included		x	x
		Includes who initiated the modification - agency/permittee	x	x
		Includes detailed description of the reason/nature of the mod	x	x
		Identifies if the modification is for a ERAC/AGO appeal	x	x
		Includes permit allowable summary by pollutant	x	x
	Old Permit Format to Old Permit Format			
		Clean original included	x	
		Marked up original included	x	
		Or		
		Bold/Strikeout electronic included	x	
	Old Permit Format to New Permit Format			
		Bold/Strikeout electronic included	x	
		File naming convention followed	x	
	New Permit Format to New Permit Format			
		Bold/Strikeout electronic included	x	
		File naming convention followed	x	
	New permit required			x
		Electronic Recommendation		x
		File naming convention followed		x

ADMINISTRATIVE MODIFICATION
inter-office communication

to: DAPC, Air Quality Modeling and Planning

from:

subject: Administrative Modification of Permit To Install

date:

Choose one:

Initiated by: ☐ Permittee ☐ DO/laa

☐ This modification is the result of an appeal to the Environmental Review Appeals Commission

Please fill out the following:

SUMMARY (for informational purposes only)
TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

Pollutant	Tons Per Year

Please provide a fairly detailed description of the basis for the modification and how the permit is being modified:

Additional comments:

Ohio EPA
Division of Air Pollution Control

inter-office communication

to: District Office or Local Air Agency Air Permit Supervisor

from: MWA Michael W. Ahern, DAPC/PMU

subject: PTI modifications

date: April 25, 1997

When requesting a PTI modification, please include a copy of the original PTI and a copy of the PTI with changes. (Please refer to the attached example.) Use red ink to change, add, and/or remove PTI requirements in the "Copy with Changes". After marking with red ink, highlight your changes. Preparing PTI modification requests like the attached example will cut down on any confusion during review, preparation, and proofing of PTI modifications resulting in more efficient, accurate, and timely processing of the permit package. Please note that modifications (as well as returned PTI's, and Final PTI Recommendations)<u>should</u> <u>not</u> be sent directly to AQM&P. This slows down the review process, creates confusion regarding where the permits are in the process (i.e., who is responsible for the permit at any given time), and severely reduces PMU's ability to assist the regulated community in tracking the progress of their permits. Feel free to send a <u>copy</u> of the permit language directly to AQM&P if you believe the traditional process of sending the permit packages to PMU may result in a significant dely. However, you <u>must</u> send the permit package to PMU so that it may be logged into the DAPC, CO system to ensure that the permit is processed in a timely and accurate manner.

Additionally, please keep the facility contact/mailing address information in mind when marking your "Copy with Changes". If this information has changed since the PTI was originally issued, the PTI modification may be mailed to the wrong person and possibly the wrong address. PTI modifications are automatically mailed to the person/address indicated on the PTI being modified.

Finally, in the cover memo for modifications, please clarify whether the modification is due to agency error and/or if it is initiated by the facility. If the modification is due to agency error (i.e., administrative error) regardless of who initiates the modification, the facility will not be charged for the modification. However, the facility should be charged a fee equal to half the fee of all affected emission units at today's rate (not to exceed $2000) if the modification is initiated by the facility due to a change in their process, stack test results, incorrect application, minor rewording, etc.

Beginning May 05, 1997, PTI modification requests missing the elements identified above may be returned.

cc: Tom Rigo, DAPC CO
Mike Hopkins, DAPC CO
Misty Parsons, DAPC CO
Alan Lloyd, DAPC CO
Safaa El-Oraby, DAPC CO

C:\DOLAA\PTIMOD.WPD

OhioEPA
State of Ohio Environmental Protection Agency

STREET ADDRESS: MAILING ADDRESS:
1800 WaterMark Drive
Columbus, OH 43215-1099
TELE: (614) 644-3020 FAX: (614) 644-2329

CERTIFIED MAIL

Re: Permit to Install
Pickaway County
Application No: 01-6606
NSPS

February 26, 1997

AGP GRAIN LIMITED
HOWARD ANDERSON
309 W. MAIN ST.
CIRCLEVILLE, OH 43113

Original,

Enclosed please find an Ohio EPA Permit to Install which will allow you to install the described source(s) in a manner indicated in the permit. Because this permit contains several conditions and restrictions I urge you to read it carefully.

The Ohio EPA is urging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment please contact our Office of Pollution Prevention at (614) 644-3469.

You are hereby notified that this action by the Director is final and may be appealed to the Ohio Environmental Board of Review pursuant to Chapter 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. It must be filed with the Environmental Board of Review within thirty (30) days after notice of the Director's action. A copy of the appeal must be served on the Director of the Ohio Environmental Protection Agency within three (3) days of filing with the Board. An appeal may be filed with the Environmental Board of Review at the following address:

Environmental Board of Review
236 East Town Street, Room 300
Columbus, Ohio 43215

Very truly yours,

Thomas G. Rigo

Thomas G. Rigo, Manager
Field Operations & Permit Section
Division of Air Pollution Control

cc: US EPA
CENTRAL DISTRICT OFFICE, DAPC

TERMINATION OF PERMIT TO INSTALL

Substantial construction for installation must take place within 18 months of the effective date of this permit. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.

NOTICE OF INSPECTION

The Director of the Ohio Environmental Protection Agency, or his authorized representatives, may enter upon the premises of the above-named applicant during construction and operation at any reasonable time for the purpose of making inspections, conducting tests, or to examine records or reports pertaining to the construction, modification or installation of the source(s) of environmental pollutants identified within this permit.

CONSTRUCTION OF NEW SOURCES

The proposed source(s) shall be constructed in strict accordance with the plans and application submitted for this permit to the Director of the Ohio Environmental Protection Agency. There may be no deviation from the approved plans without the express, written approval of the Agency. Any deviations from the approved plans or the above conditions may lead to such sanctions and penalties as provided under Ohio law. Approval of these plans does not constitute an assurance that the proposed facilities will operate in compliance with all Ohio laws and regulations. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed sources are inadequate or cannot meet applicable standards.

If the construction of the proposed source(s) has already begun or has been completed prior to the date the Director of the Environmental Protection Agency approves the permit application and plans, the approval does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the approved plans. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of Ohio Administrative Code (OAC) Rule 3745-31-02. Furthermore, issuance of the Permit to Install does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Approval of the plans in any case is not to be construed as an approval of the facility as constructed and/or completed. Moreover, issuance of the Permit to Install is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons)

AIR EMISSION SUMMARY

The air contaminant sources listed below comprise the Permit to Install for AGP GRAIN LIMITED located in Pickaway County. The sources listed below shall not exceed the emission limits/control requirements contained in the table. This condition in no way limits the applicability of any other state or federal regulations. Additionally, this condition does not limit the applicability of additional special terms and conditions of this permit.

Ohio EPA Source Number	Source Identification Description	BAT Determination	Applicable Federal & OAC Rules	Permit Allowable Mass Emissions and/or Control/Usage Requirements
I003	Grain dryer Meyer model ME 750	Compliance with terms and conditions of this permit and applicable rules	3745-31-05 3745-17-11 3745-17-07 40 CFR Part 60 Subpart DD	4.95 lbs/hr PM 1.78 TPY PM 0.007 lb/hr SO_2 >0.01 TPY SO_2 0.031 lb/hr VOC 0.01 TPY VOC 1.55 lbs/hr NO_x 0.56 TPY NO_x 0.389 lb/hr CO 0.14 TPY CO 1.24 lbs/hr PM_{10} 0.45 TPY PM_{10}

SUMMARY
TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

Pollutant	Tons/Year
PM	1.78
SO_2	>0.01
VOC	0.01
NO_x	0.56
CO	0.14
PM_{10}	0.45

NSPS REQUIREMENTS

The following sources are subject to the applicable provisions of the New Source Performance Standards (NSPS) as promulgated by the United States Environmental Protection Agency, 40 CFR Part 60.

Source No.	Source Description	NSPS Regulation (Subpart)
F003	Grain dryer	DD

AIR POLLUTION NUISANCES PROHIBITED

The air contaminant source(s) identified in this permit may not cause a public nuisance in violation of OAC Rule 3745-15-07.

NINETY DAY OPERATING PERIOD

The facility will be permitted to operate during a 90-day period in accordance with OAC Rule 3745-35-02(C)(4)(b). The purpose of this period of operation is to fulfill the performance tests conditions used in the determination of compliance with the provisions of this Permit to Install or other applicable Ohio EPA rules.

ADDITIONAL SPECIAL TERMS AND CONDITIONS

1. NEW SOURCE PERFORMANCE STANDARDS (NSPS)

   This source is subject to the applicable provisions of the New Source Performance Standards as promulgated by the United States Environmental Protection Agency, 40 CFR Part 60, Subpart DD.

2. The application and enforcement of these standards are delegated to the Ohio EPA. The requirements of 40 CFR Part 60 are also federally enforceable.

OhioEPA
State of Ohio Environmental Protection Agency

STREET ADDRESS:
1800 WaterMark Drive
Columbus, OH 43215-1099

MAILING ADDRESS:

TELE: (614) 644-3020 FAX: (614) 644-2329

CERTIFIED MAIL

Re: Permit to Install
Pickaway County
Application No: 01-6606
~~NSPS~~

February 26, 1997

Copy until hanged

AGP GRAIN LIMITED
HOWARD ANDERSON
309 W. MAIN ST.
CIRCLEVILLE, OH 43113

Enclosed please find an Ohio EPA Permit to Install which will allow you to install the described source(s) in a manner indicated in the permit. Because this permit contains several conditions and restrictions I urge you to read it carefully.

The Ohio EPA is urging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment please contact our Office of Pollution Prevention at (614) 644-3469.

You are hereby notified that this action by the Director is final and may be appealed to the Ohio Environmental Board of Review pursuant to Chapter 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. It must be filed with the Environmental Board of Review within thirty (30) days after notice of the Director's action. A copy of the appeal must be served on the Director of the Ohio Environmental Protection Agency within three (3) days of filing with the Board. An appeal may be filed with the Environmental Board of Review at the following address:

Environmental Board of Review
236 East Town Street, Room 300
Columbus, Ohio 43215

Very truly yours,

Thomas G. Rigo

Thomas G. Rigo, Manager
Field Operations & Permit Section
Division of Air Pollution Control

cc: US EPA
CENTRAL DISTRICT OFFICE, DAPC

TERMINATION OF PERMIT TO INSTALL

Substantial construction for installation must take place within 18 months of the effective date of this permit. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.

NOTICE OF INSPECTION

The Director of the Ohio Environmental Protection Agency, or his authorized representatives, may enter upon the premises of the above-named applicant during construction and operation at any reasonable time for the purpose of making inspections, conducting tests, or to examine records or reports pertaining to the construction, modification or installation of the source(s) of environmental pollutants identified within this permit.

CONSTRUCTION OF NEW SOURCES

The proposed source(s) shall be constructed in strict accordance with the plans and application submitted for this permit to the Director of the Ohio Environmental Protection Agency. There may be no deviation from the approved plans without the express, written approval of the Agency. Any deviations from the approved plans or the above conditions may lead to such sanctions and penalties as provided under Ohio law. Approval of these plans does not constitute an assurance that the proposed facilities will operate in compliance with all Ohio laws and regulations. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed sources are inadequate or cannot meet applicable standards.

If the construction of the proposed source(s) has already begun or has been completed prior to the date the Director of the Environmental Protection Agency approves the permit application and plans, the approval does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the approved plans. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of Ohio Administrative Code (OAC) Rule 3745-31-02. Furthermore, issuance of the Permit to Install does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Approval of the plans in any case is not to be construed as an approval of the facility as constructed and/or completed. Moreover, issuance of the Permit to Install is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons)

AIR EMISSION SUMMARY

The air contaminant sources listed below comprise the Permit to Install for AGP GRAIN LIMITED located in Pickaway County. The sources listed below shall not exceed the emission limits/control requirements contained in the table. This condition in no way limits the applicability of any other state or federal regulations. Additionally, this condition does not limit the applicability of additional special terms and conditions of this permit.

Ohio EPA Source Number	Source Identification Description	BAT Determination	Applicable Federal & OAC Rules	Permit Allowable Mass Emissions and/or Control/Usage Requirements
I003	Grain dryer Meyer model ME 750	Compliance with terms and conditions of this permit and applicable rules	3745-31-05 3745-17-11 3745-17-07 40 CFR Part 60 Subpart DD	4.95 lbs/hr PM 1.78 TPY PM 0.007 lb/hr SO_2 >0.01 TPY SO_2 0.031 lb/hr VOC 0.01 TPY VOC 1.55 lbs/hr NO_x 0.56 TPY NO_x 0.389 lb/hr CO 0.14 TPY CO 1.24 lbs/hr PM_{10} 0.45 TPY PM_{10}

SUMMARY
TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

Pollutant	Tons/Year
PM	1.78
SO_2	>0.01
VOC	0.01
NO_x	0.56
CO	0.14
PM_{10}	0.45

NSPS REQUIREMENTS

The following sources are subject to the applicable provisions of the New Source Performance Standards (NSPS) as promulgated by the United States Environmental Protection Agency, 40 CFR Part 60.

Source No.	Source Description	NSPS Regulation (Subpart)
F003	Grain dryer	DD

AIR POLLUTION NUISANCES PROHIBITED

The air contaminant source(s) identified in this permit may not cause a public nuisance in violation of OAC Rule 3745-15-07.

NINETY DAY OPERATING PERIOD

The facility will be permitted to operate during a 90-day period in accordance with OAC Rule 3745-35-02(C)(4)(b). The purpose of this period of operation is to fulfill the performance tests conditions used in the determination of compliance with the provisions of this Permit to Install or other applicable Ohio EPA rules.

ADDITIONAL SPECIAL TERMS AND CONDITIONS

1. NEW SOURCE PERFORMANCE STANDARDS (NSPS)

   This source is subject to the applicable provisions of the New Source Performance Standards as promulgated by the United States Environmental Protection Agency, 40 CFR Part 60, Subpart DD.

2. The application and enforcement of these standards are delegated to the Ohio EPA. The requirements of 40 CFR Part 60 are also federally enforceable.

Ohio EPA
Division of Air Pollution Control

inter-office communication

to: Distribution

from: Michael W. Ahern through Tom Rigo, DAPC/FOPS

subject: PTI Modification Fee Assessment clarification

date: August 8, 1997

Recently the Field Operations and Permits Section has received several inquiries regarding the fee applied to Permit To Install modifications. I hope the following provides some clarification to the memo sent out by Clara Daily on October 29, 1993:

1 All changes to a PTI document that do not meet the rule definition of "Modify or Modification" in OAC rule 3745-31-01-(kk), and that are initiated by the permittee, are to be charged one-half the permit fee (not to exceed $2,000) established in division (B) or (F) of ORC Section 3745.11 regardless of whether or not the permittee has begun the modification.

2. All changes to a PTI document or the development of a new PTI document based on operational additions or changes to an existing source that meet the definition of "Modify or Modification" in OAC rule 3745-31-01-(kk) that are initiated by the permittee are to be charged the full permit fee established in division (B) or (F) of ORC Section 3745.11 regardless of whether or not the permittee has initiated the modification. However, unlike a new installation, the fee associated with the modification should not be doubled even if the permittee has begun the modification. The PTI fee should be assessed "by emissions unit" if the PTI includes modified and new emissions units (i.e., new emissions units installed prior to obtaining the PTI would be charged double the fee while modified emissions units would only be charged the full fee).

3. All permit modifications due to Agency error will be processed at no expense to the permittee. NOTE: This type of modification <u>does not</u> result in a new PTI number.

J:\FOPS\GUIDANCE\PTIFEE.WPD

Please feel free to distribute this guidance as you deem appropriate.

Distribution List:

Isaac Robinson, CDO
Fred Klingelhafer, SEDO
Dennis Bush, NEDO
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Richard Canestraro, NOVAA
Susan Duckworth, Toledo DPC
Robert Ramhoff, Mahoning Trumbull APC
Mike Hopkins, DAPC/AQM&P

J:\FOPS\GUIDANCE\PTIFEE.WPD

	Type	Structure
OAC Chapter 3745-31 Permit To Install		
Regular or Chapter 31 Modification	Draft	State-Only; State-Federal
Regular or Chapter 31 Modification	Final After Draft	State-Only; State-Federal
Regular or Chapter 31 Modification	Direct Final	State-Only; State-Federal
Registration	Registration	State-Only;Telnet
Administrative Modification	Draft	State-Only; State-Federal;Telnet
Administrative Modification	Final After Draft	State-Only; State-Federal;Telnet
Administrative Modification	Direct Final	State-Only; State-Federal;Telnet
OAC Chapter 3745-35 Operating Permit		
Regular, FESOP or Modification	Draft	State-Only
Regular, FESOP or Modification	Final After Draft	State-Only
Regular or Modification	Direct Final	State-Only
Registration	Registration	Letter only
OAC Chapter 77 Title V Operating Permit		
Regular, Major Modification	Draft	State-Federal
Regular, Major Modification	Preliminary Proposed	State-Federal
Regular, Minor Permit Modification, Major Modification	Proposed	State-Federal
Regular, Administrative Permit Amendment (off permit change), Minor Permit Modification, Major Modification	Final	State-Federal

	State Only		State-Fed		Telnet	
Permit Type	Draft	Final	Draft	Final	Draft	Final
New Permit	X	X	X	X		
Registration		X				
Admin Mod	X	X	X	X	X	X
Chap 31 Mod	X	X	X	X	X	X

OhioEPA

State of Ohio Environmental Protection Agency

et Address:
Lazarus Gov. Center
122 S. Front Street
Columbus, OH 43215

TELE: (614) 644-3020 FAX: (614) 644-2329

Mailing Address:
Lazarus Gov. Center
P.O. Box 1049
Columbus, OH 43216-1049

RE: FINAL PERMIT TO INSTALL
FIELD(10) COUNTY
Application No: FIELD(1)

DATE: FIELD(2)

FIELD(5)
FIELD(30) FIELD(43)
FIELD(31) FIELD(32)
FIELD(33), FIELD(34) FIELD(35)

CERTIFIED MAIL

FIELD(21)	TOXIC REVIEW
FIELD(13)	PSD
FIELD(16)	SYNTHETIC MINOR
FIELD(17)	CEMS
FIELD(19)	MACT
FIELD(22)	NSPS
FIELD(20)	NESHAPS
FIELD(14)	NETTING
	MAJOR NON-ATTAINMENT
FIELD(18)	MODELING SUBMITTED
FIELD(29)	GASOLINE DISPENSING FACILITY

Enclosed please find an Ohio EPA Permit to Install which will allow you to install the described source(s) in a manner indicated in the permit. Because this permit contains several conditions and restrictions, I urge you to read it carefully.

The Ohio EPA is urging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Pollution Prevention at (614) 644-3469.

You are hereby notified that this action by the Director is final and may be appealed to the Ohio Environmental Review Appeals Commission pursuant to Chapter 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. It must be filed within thirty (30) days after the notice of the Directors action. A copy of the appeal must be served on the Director of the Ohio Environmental Protection Agency within three (3) days of filing with the Commission. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
236 East Town Street, Room 300
Columbus, Ohio 43215

Very truly yours,

Thomas G. Rigo

Thomas G. Rigo
Field Operations and Permit Section
Division of Air Pollution Control

CC: USEPA
XXXX

FIELD(38)

FINAL PERMIT TO INSTALL FIELD(1)

Application Number: FIELD(1)

APS Premise Number: FIELD(3)

Permit Fee: $FIELD(37)

Name of Facility: FIELD(5)

Person to Contact: FIELD(30) FIELD(43)
Address: FIELD(31) FIELD(32)
FIELD(33), FIELD(34) FIELD(35)

Location of proposed air contaminant source(s) [emissions unit(s)]:
FIELD(6)
FIELD(7), Ohio

Description of proposed emissions unit(s):
FIELD(11)

The above named entity is hereby granted a Permit to Install for the above described emissions unit(s) pursuant to hapter 3745-31 of the Ohio Administrative Code. Issuance of this permit does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the above described emissions unit(s) of environmental pollutants will operate in compliance with applicable State and Federal laws and regulations, and does not constitute expressed or implied assurance that if constructed or modified in accordance with those plans and specifications, the above described emissions unit(s) of pollutants will be granted the necessary permits to operate (air) or NPDES permits as applicable.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Director

Part I - GENERAL TERMS AND CONDITIONS

A. State and Federally Enforceable Permit To Install General Terms and Conditions

1. Monitoring and Related Recordkeeping and Reporting Requirements

a. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:

i. The date, place (as defined in the permit), and time of sampling or measurements.

ii. The date(s) analyses were performed.

iii. The company or entity that performed the analyses.

iv. The analytical techniques or methods used.

v. The results of such analyses.

vi. The operating conditions existing at the time of sampling or measurement.

b. Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.

c. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:

i. Reports of any required monitoring and/or recordkeeping of federally enforceable information shall be submitted to the appropriate Ohio EPA District Office or local air agency.

ii. Quarterly written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be made to the appropriate Ohio EPA District Office or local air agency. The written reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and

October 31 of each year and shall cover the previous calendar quarters. See B.10 below if no deviations occurred during the quarter.

iii. Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements contained in this permit shall be submitted to the appropriate Ohio EPA District Office or local air agency every six months, i.e., by January 31 and July 31 of each year for the previous six calendar months. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.

iv. Each written report shall be signed by a responsible official certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.

2. Scheduled Maintenance/Malfunction Reporting

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction, i.e., upset, of any emissions units or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. (The definition of an upset condition shall be the same as that used in OAC rule 3745-15-06(B)(1) for a malfunction.) The verbal and written reports shall be submitted pursuant to OAC rule 3745-15-06. Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emission unit(s) that is (are) served by such control system(s).

3. Risk Management Plans

If the permittee is required to develop and register a risk management plan pursuant to section 112(r) of the Clean Air Act, as amended, 42 U.S.C. 7401 et seq. ("Act"), the permittee shall comply with the requirement to register such a plan.

4. Title IV Provisions

If the permittee is subject to the requirements of 40 CFR Part 72 concerning acid rain, the permittee shall ensure that any affected emissions unit complies with those requirements. Emissions exceeding any allowances that are lawfully held under Title IV of the Act, or any regulations adopted thereunder, are prohibited.

5. Severability Clause

A determination that any term or condition of this permit is invalid shall not invalidate the force or effect of any other term or condition thereof, except to the extent that any other term or condition

depends in whole or in part for its operation or implementation upon the term or condition declared invalid.

6. General Requirements

a. The permittee must comply with all terms and conditions of this permit. Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and reissuance, or modification, or for denial of a permit renewal application.

b. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.

c. This permit may be modified, reopened, revoked, or revoked and reissued, for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.

d. This permit does not convey any property rights of any sort, or any exclusive privilege.

e. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

7. Fees

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78. The permittee shall pay all applicable Permit To Install fees within 30 days after the issuance of this Permit To Install.

8. Federal and State Enforceability

Only those terms and conditions designated in this permit as federally enforceable, that are required under the Act, or any of its applicable requirements, including relevant provisions designed to limit the potential to emit of a source, are enforceable by the Administrator of the U.S. EPA, the State, and citizens under the Act. All other terms and conditions of this permit shall not be federally enforceable and shall be enforceable under State law only.

9. Compliance Requirements

a. Any document (including reports) required to be submitted and required by a federally applicable requirement in this permit shall include a certification by a responsible official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.

b. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:

i. At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.

ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with ORC section 3704.08.

iii. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.

iv. As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.

c. The permittee shall submit progress reports to the appropriate Ohio EPA District Office or local air agency concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually, or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:

Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.

ii. An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

10. Permit To Operate Application

a. If the permittee is required to apply for a Title V permit pursuant to OAC Chapter 3745-77, the permittee shall submit a complete Title V permit application or a complete Title V permit modification application within twelve (12) months after commencing operation of the

emissions units covered by this permit. However, if the proposed new or modified source(s) would be prohibited by the terms and conditions of an existing Title V permit, a Title V permit modification must be obtained before the operation of such new or modified source(s) pursuant to OAC rule 3745-77-04(D) and OAC rule 3745-77-08(C)(3)(d).

b. If the permittee is required to apply for permit(s) pursuant to OAC Chapter 3745-35, the source(s) identified in this Permit To Install is (are) permitted to operate for a period of up to one year from the date the source(s) commenced operation. Permission to operate is granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws, regulations, and policies. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within thirty (30) days after commencing operation of the source(s) covered by this permit.

11. Best Available Technology

As specified in OAC Rule 3745-31-05, all new sources must employ Best Available Technology (BAT). Compliance with the terms and conditions of this permit will fulfill this requirement.

12. Air Pollution Nuisance

The air contaminants emitted by the emissions units covered by this permit shall not cause a public nuisance, in violation of OAC rule 3745-15-07.

B. State Only Enforceable Permit To Install General Terms and Conditions

1. Compliance Requirements

The emissions unit(s) identified in this Permit to Install shall remain in full compliance with all applicable State laws and regulations and the terms and conditions of this permit.

2. Reporting Requirements Related to Monitoring and Recordkeeping Requirements

The permittee shall submit required reports in the following manner:

a. Reports of any required monitoring and/or recordkeeping of state-only enforceable information shall be submitted to the appropriate Ohio EPA District Office or local air agency.

b. Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from state-only required emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the appropriate Ohio EPA District Office or local air agency. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

3. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The appropriate Ohio EPA District Office or local air agency must be notified in writing of any transfer of this permit.

4. Termination of Permit To Install

This permit to install shall terminate within eighteen months of the effective date of the permit to install if the owner or operator has not undertaken a continuing program of installation or modification or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation or modification. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.

5. Construction of New Sources(s)

The proposed emissions unit(s) shall be constructed in strict accordance with the plans and application submitted for this permit to the Director of the Ohio Environmental Protection Agency. There may be no deviation from the approved plans without the express, written approval of the Agency. Any deviations from the approved plans or the above conditions may lead to such sanctions and penalties as provided under Ohio law. Approval of these plans does not constitute an assurance that the proposed facilities will operate in compliance with all Ohio laws and regulations. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed sources cannot meet the requirements of this permit or cannot meet applicable standards.

If the construction of the proposed emissions unit(s) has already begun or has been completed prior to the date the Director of the Environmental Protection Agency approves the permit application and plans, the approval does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the approved plans. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of OAC rule 3745-31-02. Furthermore, issuance of the Permit to Install does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Approval of the plans in any case is not to be construed as an approval of the facility as constructed and/or completed. Moreover, issuance of the Permit to Install is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities cannot meet the requirements of this permit or cannot meet applicable standards.

6. Public Disclosure

The facility is hereby notified that this permit, and all agency records concerning the operation of this permitted source, are subject to public disclosure in accordance with OAC rule 3745-49-03.

7. Applicability

This Permit to Install is applicable only to the emissions unit(s) identified in the Permit To Install. Separate application must be made to the Director for the installation or modification of any other emissions unit(s).

8. Construction Compliance Certification

The applicant shall provide Ohio EPA with a written certification (see enclosed form) that the facility has been constructed in accordance with the Permit To Install application and the terms and conditions of the Permit to Install. The certification shall be provided to Ohio EPA upon completion of construction but prior to startup of the source.

9. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations (See Section A of This Permit)

If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

C. Permit To Install Summary of Allowable Emissions

The following information summarizes the total allowable emissions, by pollutant, based on the individual allowable emissions of each air contaminant source identified in this permit.

OhioEPA

State of Ohio Environmental Protection Agency

Street Address:
Lazarus Gov. Center
122 S. Front Street
Columbus, OH 43215

TELE: (614) 644-3020 FAX: (614) 644-2329

Mailing Address:

RE: FINAL PERMIT TO INSTALL
FIELD(10) COUNTY
Application No: FIELD(1)

CERTIFIED MAIL

FIELD(21)	TOXIC REVIEW
FIELD(13)	PSD
FIELD(16)	SYNTHETIC MINOR
FIELD(17)	CEMS
FIELD(19)	MACT
FIELD(22)	NSPS
FIELD(20)	NESHAPS
FIELD(14)	NETTING
	MAJOR NON-ATTAINMENT
FIELD(18)	MODELING SUBMITTED
FIELD(29)	GASOLINE DISPENSING FACILITY

DATE: FIELD(2)

FIELD(5)
FIELD(30) FIELD(43)
FIELD(31) FIELD(32)
FIELD(33), FIELD(34) FIELD(35)

Enclosed please find an Ohio EPA Permit to Install which will allow you to install the described source(s) in a manner indicated in the permit. Because this permit contains several conditions and restrictions, I urge you to read it carefully.

The Ohio EPA is urging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Pollution Prevention at (614) 644-3469.

You are hereby notified that this action by the Director is final and may be appealed to the Ohio Environmental Review Appeals Commission pursuant to Chapter 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. It must be filed within thirty (30) days after the notice of the Directors action. A copy of the appeal must be served on the Director of the Ohio Environmental Protection Agency within three (3) days of filing with the Commission. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
236 East Town Street, Room 300
Columbus, Ohio 43215

Very truly yours,

Thomas G. Rigo

Thomas G. Rigo, Manager
Field Operations and Permit Section
ivision of Air Pollution Control

cc: USEPA FIELD(38)
XXXX

STATE OF OHIO ENVIRONMENTAL PROTECTION AGENCY

Permit To Install
Terms and Conditions

Issue Date: FIELD(2)
Effective Date: FIELD(2)

FINAL PERMIT TO INSTALL FIELD(1)

Application Number: FIELD(1)

APS Premise Number: FIELD(3)

Permit Fee: $FIELD(37)

Name of Facility: FIELD(5)

Person to Contact: FIELD(30) FIELD(43)
Address: FIELD(31) FIELD(32)
FIELD(33), FIELD(34) FIELD(35)

Location of proposed air contaminant source(s) [emissions unit(s)]:
FIELD(6)
FIELD(7), **Ohio**

Description of proposed emissions unit(s):
FIELD(11)

The above named entity is hereby granted a Permit to Install for the above described emissions unit(s) pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this permit does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the above described emissions unit(s) of environmental pollutants will operate in compliance with applicable State and Federal laws and regulations, and does not constitute expressed or implied assurance that if constructed or modified in accordance with those plans and specifications, the above described emissions unit(s) of pollutants will be granted the necessary permits to operate (air) or NPDES permits as applicable.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Director

Facility ID: FIELD(3)

Part I - GENERAL TERMS AND CONDITIONS

A. Permit to Install General Terms and Conditions

1. Compliance Requirements

The emissions unit(s) identified in this Permit to Install shall remain in full compliance with all applicable State laws and regulations and the terms and conditions of this permit.

2. Reporting Requirements Related to Monitoring and Recordkeeping Requirements

The permittee shall submit required reports in the following manner:

a. Reports of any required monitoring and/or recordkeeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.

b. Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the appropriate Ohio EPA District Office or local air agency. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

3. Records Retention Requirements

Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.

4. Inspections and Information Requests

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon the premises of this source at any reasonable time for purposes of making inspections, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State air pollution laws and regulations and the terms and conditions of this permit. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the

Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

5. Scheduled Maintenance/Malfunction Reporting

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction of any emissions units or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s).

6. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The appropriate Ohio EPA District Office or local air agency must be notified in writing of any transfer of this permit.

7. Air Pollution Nuisance

The air contaminants emitted by the emissions units covered by this permit shall not cause a public nuisance, in violation of OAC rule 3745-15-07.

8. Termination of Permit to Install

This Permit to Install shall terminate within eighteen months of the effective date of the Permit to Install if the owner or operator has not undertaken a continuing program of installation or modification or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation or modification. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.

9. Construction of New Sources(s)

The proposed emissions unit(s) shall be constructed in strict accordance with the plans and application submitted for this permit to the Director of the Ohio Environmental Protection Agency. There may be no deviation from the approved plans without the express, written approval of the Agency. Any deviations from the approved plans or the above conditions may lead to such sanctions and penalties as provided under Ohio law. Approval of these plans does not constitute an assurance that the proposed facilities will operate in compliance with all Ohio laws and regulations. Additional

facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed sources cannot meet the requirements of this permit or cannot meet applicable standards.

If the construction of the proposed emissions unit(s) has already begun or has been completed prior to the date the Director of the Environmental Protection Agency approves the permit application and plans, the approval does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the approved plans. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of OAC rule 3745-31-02. Furthermore, issuance of the Permit to Install does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Approval of the plans in any case is not to be construed as an approval of the facility as constructed and/or completed. Moreover, issuance of the Permit to Install is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities cannot meet the requirements of this permit or cannot meet applicable standards.

10. Public Disclosure

The facility is hereby notified that this permit, and all agency records concerning the operation of this permitted source, are subject to public disclosure in accordance with OAC rule 3745-49-03.

11. Applicability

This Permit to Install is applicable only to the emissions unit(s) identified in the Permit to Install. Separate application must be made to the Director for the installation or modification of any other emissions unit(s).

12. Best Available Technology

As specified in OAC Rule 3745-31-05, all new sources must employ Best Available Technology (BAT). Compliance with the terms and conditions of this permit will fulfill this requirement.

13. Source Operation and Operating Permit Requirements After Completion of Construction

This facility is permitted to operate each source described by this Permit to Install for a period of up to one year from the date the source commenced operation. This permission to operate is granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws, regulations, and policies. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within thirty (30) days after commencing operation of the emissions unit(s) covered by this permit.

Facility ID: FIELD(3)

14. Construction Compliance Certification

The applicant shall provide Ohio EPA with a written certification (see enclosed form) that the facility has been constructed in accordance with the Permit to Install application and the terms and conditions of the Permit to Install. The certification shall be provided to Ohio EPA upon completion of construction but prior to startup of the source.

15. Fees

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78. The permittee shall pay all applicable Permit to Install fees within 30 days after the issuance of this Permit to Install.

B. Permit to Install Summary of Allowable Emissions

The following information summarizes the total allowable emissions, by pollutant, based on the individual allowable emissions of each air contaminant source identified in this permit.

SUMMARY (for informational purposes only)
TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

Pollutant	Tons Per Year

© Mike PTI Tracker and Manual Direct Find Data Report Inc

Ohio EPA
Division of Air Pollution Control

inter-office communication

to: Distribution via e-mail (DO/laa Supervisors)

from: Mike Hopkins and Mike Ahern, DAPC Central Office

subject: Changed/Expanded Guidance for Synthetic Minor Permits To Install using the new PTI Format

date: April 7, 1999

Questions were raised during the recent PTI training on how/what format Synthetic Minor Permits should be processed. At the time of the training we thought the Synthetic Minor PTIs should be in the Title V format. However, after hearing some of the questions, and considering the matter further, we have concluded that, the only time a Title V format PTI will be used is when either the current/future status of the facility will be/remain subject to Title V (even after the Synthetic Minor PTI is issued) or a new facility will be subject to Title V (even after the Synthetic Minor PTI is issued).

In deciding which format to use ask yourself the following two questions:

1) What will be the potential to emit status of the facility for each regulated pollutant once the PTI is issued?

2) Does the PTE exceed any of the major source thresholds pursuant to the Title V requirements (as identified in OAC Chapter 3745-77 and identified by example in Engineering Guide 61)?

If you answer yes to question 2, use the Title V format PTI template

NOTE FOR MODIFICATIONS: If you are processing a PTI modification (either administrative or pursuant to OAC Chapter 3745-31) for an emissions unit located at a Title V facility, you do not need to change the structure of the permit to fit the Title V format. You may choose to keep the structure in the "old" format if you wish or you may decide to change the format to the Title V structure.

We hope this change/expansion in guidance does not cause undue hardship. This guidance is being sent via e-mail in order to expedite dissemination of this information. Please pass this guidance on to anyone who you feel may benefit from it.

The following guidance should be considered when reviewing emissions units that have been permitted in the past, but since the time they were last permitted, exemptions have been added either to OAC Chapter 3745-35 or 3745-31:

1) **Addition of exemptions to OAC Chapter 3745-31 and existing permitted (PTI) emissions units**
Emissions units that are permitted under a PTI cannot be removed from the requirements of the PTI even if an exemption becomes available at some point after the permit is issued. However, if the permittee makes a change to the operation and submits a new PTI application for the emissions unit, the DO/LAA may then recognize the exemption associated with the operation and remove the emissions unit from the permitting system.

2) **Addition of exemptions to OAC Chapter 3745-35 and existing permitted (PTI and/or PTO) emissions units**
If the permittee has a valid operating permit and, during the effective period of the operating permit, an applicable exemption is added to OAC Chapter 3745-35, the permittee must submit a renewal application in order to be considered to have the emissions unit removed from the permitting system. The DO/LAA may then recognize the exemption and the emissions unit will drop out (i.e., be withdrawn as exempt) from the operating permit requirements. *However*, the PTI would continue to remain enforceable. *Note*: if there are other permitted emissions units at the facility, the permittee would continue to pay Non-Title V fees on the basis of the estimated actual emissions at the entire facility, including the emissions unit that is dropping out of the operating permit program (see Ohio Revised code 3745.11(D))

3) **Non-Concurrent Addition of exemptions to OAC Chapters 3745-31 or 3745-35, and existing permitted (PTI and/or PTO) emissions units**
Although on the surface OAC Chapter 3745-31 and OAC Chapter 3745-35 exemptions *should* mirror one another, there is usually some lag time between or reason(s) for the exemptions to not match up exactly. This is particularly the case where there is an exemption in OAC Chapter 3745-35, but no corresponding exemption in OAC Chapter 3745-31 In this case, the owner or operator would be required to apply for and obtain a PTI, but would not be required to apply for or obtain a PTO for a *new* emissions unit. In the case of a post 1974 constructed emissions unit with valid permits (PTI and PTO) at the time the applicable exemption is added to OAC Chapter 3745-35, the emissions unit could be withdrawn from the operating permit program upon timely receipt and review of the renewal application. *However*, the PTI would continue to remain enforceable unless an applicable exemption is added to OAC Chapter 3745-31 and a PTI modification is requested and processed. *Note:* if this were the only emissions unit at the facility, the facility would drop out of the Non-Title V emissions fee program, otherwise the permittee would continue to pay Non-Title V fees on the basis of the estimated actual emissions at the entire facility, including the emissions unit that is dropping out of the operating permit program (see Ohio Revised code 3745.11(D)).

Note: In general an application is required in order to provide the Agency the opportunity to

determine if an exemption is valid, or if the emissions unit should remain in the permitting system. There may be some instances where an exemption is added for a category of emissions activities, but the DO/LAA believes that the particular emissions unit should remain in the permitting program (e.g., an emissions unit that may cause a nuisance if the permits are no longer effective).

draft

PTI Tracking guidance:

The Following guidance provides the structure that shpould be used in developing the PTI in order to easily transfer terms to the PTO. Note, the margins are set up as 0.25 inches all the way around the page. The tabs are set in 1/2" increments. The following pages provide how the numbering system should look under subsections. Note: DO **NOT** USE THE AUTOMATIC NUMBERING SYSTEM PROVIDED BY WORDPERFECT.

Other items of interest:
REMINDER: **PLEASE USE THE F7 KEY WHEN INDENTIUNG**. Several folks continue to not use the F7 key. It is extremely important as it affects the format of the PTI as it moves from one computer system to another.

Reminder: The new format requires a seprate set of terms and conditions for each emissions unit. This applies even when several emissions units terms and conditions have identical terms within the same permit.

EXAMPLE OF STATE PTI PERMIT STRUCTURE

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
DESCRIPTION	OAC rule 3745-31-05	LIMIT(s)

2. **Additional Terms and Conditions**

2.a None.
- i. None
  - (a) None.
    - (i) None.
    - (ii) None.
    - None.
    - (i) None.
    - (ii) None.
- ii. None.
  - (a) None.
    - (i) None.
    - (ii) None.
    - None.
    - (i) None.
    - (ii) None.

2.b None.
- None.
- ii None.
  - (a) None.
  - (b) None.
    - (i) None.
    - (ii) None.

B. Operational Restrictions

None

None

None

(a) None.

(i) None.

(ii) None.

None

(i) None

(ii) None

None

(a) None.

(i) None.

(ii) None.

(b) None

(i) None

(ii) None

None.

None

(a) None

(i) None

(ii) None

(b) None

None

(ii) None

None

(a) None

(i) None

(ii) None

(b) None

(i) None

(ii) None

None

None

None

(a) None

(i) None

(ii) None

None

None

(ii) None

None

(a) None

(i) None

(ii) None

(i) None

(ii) None

b. None

None

(a) None

(i) None.
(ii) None.
(b) None.
(i) None.
(ii) None.
ii. None.
(a) None.
(i) None.
(ii) None.
(b) None.
(i) None.
(ii) None.

C. Monitoring and/or Recordkeeping Requirements

Same as B

D. Reporting Requirements

Same as B

E. Testing Requirements

Same as B

F. Miscellaneous Requirements

Same as B

EXAMPLE OF TITLE V PTI PERMIT STRUCTURE

Part II -Facility Specific Terms and Conditions

A. State and Federally Enforceable Permit To Install Facility Specific Terms and Conditions

1. None.

B. State Only Enforceable Permit To Install Facility Specific Terms and Conditions

1. None

EXAMPLE OF TITLE V PTI PERMIT STRUCTURE

Part III - Special Terms and Conditions for Specific Emissions Unit(s)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
None.	**None.**	**None.**

2. **Additional Terms and Conditions**

2.a None.

None

(a) None.

(i) None.

(ii) None.

(b) None.

(i) None.

(ii) None.

ii None.

(a) None.

(i) None.

(ii) None.

(b) None.

(i) None.

(ii) None.

2.b None.

i None

(a) None.

(i) None.

(ii) None.

(b) None.

(i) None.

(ii) None.

ii None.

(a) None.

(i) None.

(ii) None.

(b) None.

(i) None.

(ii) None.

II. Operational Restrictions

1. None.
   a. None.
      i. None.
         (a) None.
            (i) None.
            (ii) None.
         (b) None.
            (i) None.
            (ii) None.
      ii. None.
         (a) None.
            (i) None.
            (ii) None.
         (b) None.
            (i) None.
            (ii) None.

   b. None.
      None.
         (a) None.
            (i) None.
            (ii) None.
         (b) None.
            (i) None.
            (ii) None.
      ii. None.
         (a) None.
            (i) None.
            (ii) None.
         (b) None.
            (i) None.
            (ii) None.

2. None.
   a. None.
      i. None.
         (a) None.
            (i) None.
            (ii) None.
         (b) None.
            (i) None.
            (ii) None.
      ii. None.
         (a) None.
            (i) None.
            (ii) None.
         (b) None.
            (i) None.
            (ii) None.

b. None.

i. None.

(a) None.

(i) None.

(ii) None.

(b) None.

(i) None.

(ii) None.

ii. None.

(a) None.

(i) None.

(ii) None.

(b) None.

(i) None.

(ii) None.

III. Monitoring and/or Recordkeeping Requirements

Same as II above

IV. Reporting Requirements

Same as II above

V. Testing Requirements

Same as II above

VI. Miscellaneous Requirements

Same as II above

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
None.	**None.**	**None.**

2. Additional Terms and Conditions

2.a None.

i. None

(a) None.

(i) None.

(ii) None.

(b) None.

(i) None.

(ii) None.

ii. None.

(a) None.

(i) None.

(ii) None.

(b) None.

(i) None.

(ii) None.

2.b None.

i. None.

ii. None.

(a) None.

(b) None.

(i) None.

(ii) None.

II. Operational Restrictions

1. None.

a. None.

i. None.

(a) None.

(i) None.

(ii) None.

(b) None

None

(ii) None

None

(a) None

(i) None.

(ii) None

(b) None

None

(ii) None

b. None.

None

(a) None

(i) None.

(ii) None

None

(i) None

(ii) None

None

(a) None

None

None

None.

(i) None

(ii) None

None

None.

(a) None

(i) None

(ii) None

(b) None.

(i) None

(ii) None

None

(a) None

(i) None.

(ii) None.

(b) None

(i) None

(ii) None

None

None

(a) None.

None

(ii) None

(b) None

None

(ii) None

None

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Page 107

(a) None.
  (i) None.
  (ii) None.
(b) None.
  (i) None.
  (ii) None.

III. Monitoring and/or Recordkeeping Requirements

Same as II above

IV. Reporting Requirements

Same as II above

V. Testing Requirements

Same as II above

VI. Miscellaneous Requirements

Same as II above

Mike H

CC: Mary
Alan
Safaa

OhioEPA
State of Ohio Environmental Protection Agency

STREET ADDRESS:
1800 WaterMark Drive
Columbus, OH 43215-1099

TELE: (614) 644-3020 FAX: (614) 644-2329

MAILING ADDRESS:
P.O. Box 1049
Columbus, OH 43216-1049

Return Hopkins

January 24, 1997

Ms. Kelly R. Kinder
Director of Energy and Environment
Ohio Chamber of Commerce
P.O. Box 15159
230 East Town Street
Columbus, Ohio 43215-0159

Dear Ms. Kinder:

Thank you for your November 12, 1996 letter regarding your members' comments and concerns with Engineering Guide #65 and issues associated with implementation of this guidance and with the so-called "gap-filling" monitoring, recordkeeping, and reporting requirements.

First, let me apologize for the delay in my response to you. However, issues pertaining to the guidance are very important to many of your members. My staff, in both the Director's Office and the Division of Air Pollution Control required time for this response. To begin, let me assure your membership that Engineering Guide #65 is guidance and does not represent a mandatory approach to satisfying the required monitoring, recordkeeping and reporting requirements for each applicable requirement associated with significant emission units at a Title V facility. To the contrary, Ohio EPA fully realizes that there may be more than one acceptable way to meet these requirements. Therefore, our district office, local air agency, and central office permit review staff have been directed to give first consideration to the approach offered by the Title V applicant. If we find the applicant's approach to be acceptable, then that approach will be specified in the draft Title V permit. However, if we find the applicant's approach to be unacceptable because it fails to provide periodic monitoring sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirement, as required by U.S.EPA and OAC rule 3745-77-07(A)(3)(a)(ii), then we would use Engineering Guide #65.

We do not agree that gap-filling periodic monitoring, recordkeeping and reporting requirements that have been suggested in Engineering Guide #65 are new. Again, Engineering Guide #65 was developed based on 20 years of experience of both Agency staff and the managers in the regulated community whose responsibility it is to monitor emissions to comply with their air permits. Engineering Guide #65 is intended to save time for the regulated community by directing permittees quickly to guidance on acceptable programs that have evolved over time. This guidance evolved from Engineering Guide #43, issued in March 1983, which spelled out prototype special terms and conditions to be placed in permits. Engineering Guide #65 expanded upon the earlier guidance. It is our objective to be able to improve our current permitting programs (permit to install, permit to operate, and Title V permits) with predictable, practical, consistent, well-prepared terms and conditions for monitoring, recordkeeping and reporting

requirements.

We have received many positive comments from the Ohio regulated community for providing guidance on acceptable monitoring, recordkeeping and reporting programs that are required for each significant emissions unit in the Title V permit application.

Your letter also suggests that Engineering Guide #65 should not be finalized until U.S. EPA finalizes the Compliance Assurance Monitoring (CAM) rules that have already been subjected to a number of revisions. As your members may know, these enhanced monitoring rules were supposed to be finalized years ago. Due to the level of controversy these proposed rules have generated, it is impossible to predict when the CAM rules will become final. Ohio needs to start issuing the first round of Title V permits and cannot wait for the CAM rules to be finalized.

Ohio EPA believes that many members of the regulated community have misinterpreted the proposed new CAM rule. The proposed CAM rule focuses on only a small set of the largest emissions units. For them, the proposed rule has very detailed requirements if an emissions unit meets the prescribed cutoff for controlled emissions units (more detailed and restrictive requirements than are described in Engineering Guide #65). More importantly, the proposed CAM rule requires that periodic monitoring, recordkeeping and reporting requirements be worked out with the states for all other significant emissions units (including the smallest controlled emissions units) that fall below the prescribed cutoff for controlled emissions units. I agree with Bob Hodanbosi, Chief, Division of Air Pollution Control, that Engineering Guide #65 fulfills that requirement in Ohio.

Your letter also suggests that Ohio EPA is not taking advantage of the flexibility currently offered by U.S.EPA. We do not agree. U.S.EPA expects states to provide periodic monitoring sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with all the applicable requirements for each significant emissions unit. Recent communications with Region V regarding Ohio's first five (5) Title V permits confirm these federal expectations. It is U.S.EPA's policy that states failing to provide acceptable gap-filling monitoring, recordkeeping and reporting requirements in their proposed Title V permits, can expect to receive comments form the Regional office and, if changes are not made, those Title V permits will be vetoed by the U.S.EPA. Ohio regulation OAC rule 3745-77-07(A)(3)(a)(ii) requires gap-filling periodic monitoring. U.S.EPA expects this provision of our law to be followed, and Guide #65 is our approach to comply with this rule. Enclosed is a copy of a January 10, 1997 letter from U.S.EPA that identifies their expectation for states to require gap-filling periodic monitoring in Title V permits.

Historically, all of the Agency's regulatory programs have been based on monitoring, recordkeeping, and reporting as fundamental to the permittee's role in assuring compliance, rather than relying on frequent on-site inspections by government personnel. I believe that monitoring, recordkeeping, and reporting are essential components of the State's environmental programs, and

I am not persuaded that it is wise to omit these because of anticipated federal decisions on ACE, CAM, or others. Rather, monitoring, recordkeeping, and reporting remain key ingredients to the State's programs. More to the point is how effectively and efficiently we can tailor these key ingredients to individual permits and to sectors of the regulated community.

I am always interested in improving the efficiency and effectiveness of Agency programs. And, to this end, you have suggested that a nontechnical group be formed to work on Engineering Guide #65 issues. I understand that a technical subcommittee or workgroup of the Permit Advisory Group has been meeting for about a year to resolve these issues. I am not satisfied that this process has managed to bring closure to all the technical and legal issues discussed. Accordingly, Bob Hodanbosi has directed his staff to bring more structure to the process of the workgroup, with the view of bringing closure to every issue discussed. All participants should contribute to a written agenda, prepared in advance of meetings. Minutes will be recorded and circulated among participants for comment and concurrence (electronically). If, after two meetings, participants cannot agree, the minutes must reflect "Issues in Dispute" and "Recommendations" which are to be forwarded to Bob Hodanbosi for his decision. Depending on the issue, Bob may consult with his staff, with the Ohio EPA Legal Staff, and/or me. I prefer to improve the existing workgroup with these procedures, rather than organize another nontechnical group.

I want to again thank the Ohio industrial representatives that serve on the PAG and the legal and technical committees of the PAG for their time and valuable input toward the development and implementation of the Ohio Title V permitting program. I appreciate the unique approach to Title V implementation in Ohio, thanks in large part to dialog maintained between the Agency and your members. For further assistance, please do not hesitate to contact me, Jennifer Tiell or Bob Hodanbosi.

Sincerely yours,

Donald R. Schregardus
Director

Enclosure

cc: Jennifer Tiell, Deputy Director
Bob Hodanbosi, DAPC
Jim Orlemann, DAPC
Tom Rigo, DAPC
Mike Hopkins, DAPC
Kate Bartter, Director's Office
Vaughn Laughlin, Director's Office
Mary Mertz, Governor's Office
Bruce Weinberg, DAPC
Jeanne Mallett, Legal

Cruce

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

REPLY TO THE ATTENTION OF:

(AR-18J)

JAN 10 1997

Robert Hodanbosi, Chief
Division of Air Pollution Control
Ohio Environmental Protection Agency
1800 Watermark Drive
P.O. Box 1049
Columbus, Ohio 43216

Dear Mr. Hodanbosi:

I am writing this letter to all Region 5 States to reaffirm the United States Environmental Protection Agency's (USEPA) commitment to ensure the integrity of the Clean Air Act's Title V program and the permits issued thereunder. It has come to our attention that there may still be some questions regarding the monitoring, record keeping, and reporting requirements of the Title V program.

Monitoring, record keeping, and reporting requirements are important elements of a technically sound and enforceable Title V permit. Section 70.6(a)(3) of the Title V regulations specifies the standard monitoring and related record keeping and reporting requirements that each Title V permit must contain. One important element of the monitoring, record keeping, and reporting requirements of Title V is that each permit must contain periodic monitoring sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the permit, if the underlying applicable requirements do not otherwise specify such monitoring. This provision is commonly referred to as the gap-filling provision. Therefore, if the underlying applicable requirements, such as construction permit conditions or State Implementation Plan requirements, do not contain adequate monitoring, record keeping, and reporting provisions sufficient to provide such reliable data, the State must add such provisions in the Title V permit, and these provisions must be located in the federally enforceable section of the permit. This periodic monitoring requirement is a Title V program element, and it exists independent of the USEPA's future actions with respect to the Compliance Assurance Monitoring regulations, which are currently under consideration.

The USEPA has not issued any guidance related to the content or sufficiency of Title V periodic monitoring scenarios, and State permitting authorities have significant discretion to tailor the application of the gap-filling requirement in ways that are effective and reasonable. Nonetheless, Title V does require that operating permits include gap-filling measures where needed. We have discussed this matter with USEPA Headquarters offices and can confirm that this is their position as well.

Oil Based Inks on 100% Recycled Paper (40% Postconsumer)

Enclosed are some excerpts from recent Wisconsin Title V permits which contain periodic monitoring elements that meet the intent of the Title V provisions. I am using examples from Wisconsin as this State is the furthest along in the actual issuance of Title V permits in Region 5, and Wisconsin's Title V permit format is designed to assure that compliance requirements are included. Please note that these examples are provided to show Wisconsin's approach of addressing the periodic monitoring requirements, and are not comprehensive of all the variations to gap-filling that are possible for any given situation. Also, note that many of the specific Wisconsin statutory and regulation citations in column B of these excerpts refer to the state's general authority for establishing gap filling or expand upon underlying general monitoring requirements. These permits are available for viewing on the Internet at the Wisconsin Department of Natural Resources Gopher site.

As Region 5 works with its States to implement Title V permitting, the presence of periodic monitoring requirements is one area which will receive Regional review. Any permit that does not contain the periodic monitoring provisions as required by 40 CFR 70.6 is subject to an USEPA veto in accordance with the objection provisions in 40 CFR 70.8(c).

I hope this letter and the examples I have provided clarify the Agency's position that periodic monitoring provisions must be contained in all Title V permits, regardless of the underlying regulations. If you or your staff have any questions regarding this information, please feel free to contact Kaushal Gupta, Ohio Permit Specialist, at (312) 886-6803.

Sincerely yours,

Stephen Rothblatt, Chief
Air Programs Branch

Enclosures

(EPA Note: Excerpt from Zalk Josephs Fabricators Inc. - Issued April 29, 1996. [illegible] al testing and reporting requirements are included in Section C., Tes and Reporting Requirements Applicable to the Entire Facility, and Part II, General Permit Conditions.)

PART I
APPLICABLE LIMITATIONS AND SPECIFIC CONDITIONS

A. S98/P03/C03: Shotblast. Fabric Filter Control. Installed 1979.

POLLUTANT	a. LIMITATIONS	b. COMPLIANCE DEMONSTRATION	c. REFERENCE TEST METHODS, RECORDKEEPING AND MONITORING
1. Particulate Matter Emissions	(1) The emissions may not exceed 6.12 lb/hr.[1] [§ NR 415.05(1)(o) and (2), Wis. Adm. Code]	(1) The baghouse must be controlling emissions and operating properly at all times shotblasting is being performed. [§ 144.394(3), Wis. Stat.] (2) The pressure drop across the baghouse shall be maintained between 1 and 10 inches of water. [§ NR 439.055(1)(a), Wis. Adm. Code] (3) The facility shall perform a weekly inspection of the baghouse to ensure there are no broken/torn bags which would allow excess emissions. [§ NR 407.09(1)(c)1.b., Wis. Adm. Code]	(1) Whenever compliance testing is required, USEPA Method 5, including the condensible backhalf, shall be used. When approved in writing an equivalent test method may be substituted for the required test method. [§ NR 439.06(1), Wis. Adm. Code] (2) The facility shall install, operate, calibrate and maintain a pressure drop monitor at the baghouse. [§ NR 439.055(1), Wis. Adm. Code] (3) The pressure drop across the baghouse shall be monitored continuously. [§ NR 439.055(1)(a), Wis. Adm. Code] (4) The facility shall maintain the following records: (a) A log of the name or initials of the operator performing each weekly baghouse inspection and the time each inspection took place. (b) A description of any maintenance or repairs of the baghouse that resulted from the inspection. (c) The daily pressure drop readings. [§ NR 439.04(1)(d), Wis. Adm. Code]

[1] This is the most restrictive allowable emission rate, based on the equation 0.40 lb/1000 lb gas x (Airflow) scfm x 0.075 lb/cf x 60 min/hr, based on a maximum airflow of 3400 acfm and at an exhaust gas temperature that is considered standard conditions. Operation of the baghouse is required in order to allow the facility to comply with this limit.

(EPA note: Excerpt from Zalk Josephs Fabricators Inc. - Issued April 29, 1996. [illegible] al testing and reporting requirements are included in Section C., Tes and Reporting Requirements Applicable to the Entire Facility, and Part II, General Permit Conditions.)

PART I
APPLICABLE LIMITATIONS AND SPECIFIC CONDITIONS

A. S98/P03/C03: Shotblast. Fabric Filter Control. Installed 1979.

POLLUTANT	a. LIMITATIONS	b. COMPLIANCE DEMONSTRATION	c. REFERENCE TEST METHODS, RECORDKEEPING AND MONITORING
1. Particulate Matter Emissions	(1) The emissions may not exceed 6.12 lb/hr.[1] [§ NR 415.05(1)(o) and (2), Wis. Adm. Code]	(1) The baghouse must be controlling emissions and operating properly at all times shotblasting is being performed. [§ 144.394(3), Wis. Stat.] (2) The pressure drop across the baghouse shall be maintained between 1 and 10 inches of water. [§ NR 439.055(1)(a), Wis. Adm. Code] (3) The facility shall perform a weekly inspection of the baghouse to ensure there are no broken/torn bags which would allow excess emissions. [§ NR 407.09(1)(c)1.b., Wis. Adm. Code]	(1) Whenever compliance testing is required, USEPA Method 5, including the condensible backhalf, shall be used. When approved in writing an equivalent test method may be substituted for the required test method. [§ NR 439.06(1), Wis. Adm. Code] (2) The facility shall install, operate, calibrate and maintain a pressure drop monitor at the baghouse. [§ NR 439.055(1), Wis. Adm. Code] (3) The pressure drop across the baghouse shall be monitored continuously. [§ NR 439.055(1)(a), Wis. Adm. Code] (4) The facility shall maintain the following records: (a) A log of the name or initials of the operator performing each weekly baghouse inspection and the time each inspection took place. (b) A description of any maintenance or repairs of the baghouse that resulted from the inspection. (c) The daily pressure drop readings. [§ NR 439.04(1)(d), Wis. Adm. Code]

[1] This is the most restrictive allowable emission rate, based on the equation 0.40 lb/1000 lb gas x (Airflow) scfm x 0.075 lb/cf x 60 min/hr, based on a maximum airflow of 3400 acfm and at an exhaust gas temperature that is considered standard conditions. Operation of the baghouse is required in order to allow the facility to comply with this limit.

(EPA note: Excerpt from American Packaging Corporation - Issued December 1, [illegible] Testing and Reporting Requirements Applicable to the Entire Facility, and Part II, General Permit Conditions.)

PART I
APPLICABLE EMISSION LIMITATIONS AND REQUIREMENTS

A. S01/P01: Packaging Rotogravure Press "Roto #1" ; installed 1973. AND S01/P02: Packaging Rotogravure Press "Roto #2"; installed 1977.

POLLUTANTS	a. LIMITATIONS	b. COMPLIANCE DEMONSTRATION	c. REFERENCE TEST METHODS, RECORDKEEPING AND MONITORING
1. Volatile Organic Compounds - Rotogravure Inks and Solvents	For each of these presses, the following apply: (1) Incineration of volatile organic compounds such that 90%, by weight, of VOCs that enter the incinerator are oxidized to nonorganic compounds. [s. NR 422.14(2)(c)2., Wis. Adm. Code] (2) The overall emissions reduction efficiency of capture and control systems shall be 65% where a packaging rotogravure process is employed. [s. NR 422.14(3)(b), Wis. Adm. Code]	(1) The incinerator shall be in operation and controlling the VOC emissions at all times the presses are in operation. [s. NR 144.394(4), Wis Stat.] (2) The operation temperature of the primary chamber in the incinerator, meaured at three thermocouples and averaged, shall be a minimum of 1400 °F. [s. 144.394(4), Wis. Stat.] (3) For each press, the pressure drop across the duct from the press to the oxidizer shall be within the range recorded during the most recent stack test which showed the capture efficiency was in compliance with the requirement in A.1.a.(2) for overall control efficiency. [s. NR 407.09(1)(c)1.b., Wis. Adm. Code] (4) Initial compliance testing shall be performed within 90 days of issuance of this permit to establish measurement of the parameters in A.1.b.(2) and (3) and compliance with the requirements in A.1.a.(1) and (2). [s. NR 439.075(2)(a)4., Wis. Adm. Code] (5) Periodic testing shall be performed to demonstrate compliance with the requirements in A.1.a.(1) and (2) every 24 months, within 90 days of the anniversary date of the initial compliance test. [s. NR 439.075(2)(a)4. and (3)(b), Wis. Adm. Code]	(1) Whenever compliance testing for the VOC destruction efficiencies is required, USEPA Method 25 or 25A, or any equivalent method approved by the Department in writing, shall be used. [s. NR 439.06(3)(a), Wis. Adm. Code] (2) Whenever compliance testing is required for capture efficiencies, a test plan shall be submitted for department approval according to the requirements in F.4.b.(1)(b). [s. NR 439.06(8), Wis. Adm. Code] (3) The facility shall install, operate, calibrate and maintain a pressure drop monitor at each press, which shall be located between the last fan on the dryers' combined exhaust and the damper prior to the main duct connected to the oxidizer. [s. 144.394(4), Wis. Stat.] (4) For each press, the pressure drop across the duct from the press to the oxidizer shall be monitored and recorded at least every 15 minutes[1]. [ss. NR 407.09(1)(c)1.b. and NR 439.04(1)(d), Wis. Adm. Code] (5) The operation temperature in the primary chamber of the incinerator shall be monitored and recorded at least every 15 minutes. [s. NR 439.055(2)(a), Wis. Adm. Code] (6) For any printing line, records shall be kept on a monthly basis that include but are not limited to: (a) A unique identification for each of the coatings, as applied, used during that month. (b) The VOC content of each ink, as applied, in pounds per gallon. [s. NR 439.04(5)(d), Wis. Adm. Code]

[1] This is a surrogate operation parameter established for periodic capture efficiency compliance demonstration

(Ex... Excerpt from WIS DOA / Capitol Heat & Power - Issued August 29, ... ditional testing and reporting requirements are included in Section Testing and Reporting Requirements Applicable to the Entire Facility, and Part II, General Permit Conditions.)

C. S11, B23 - Industrial Water Tube Type Boiler rated at 104.5 mmBtu/hour - Installed 1971

POLLUTANT	a. LIMITATIONS	b. COMPLIANCE DEMONSTRATION METHODS	c. REFERENCE TEST METHODS, RECORDKEEPING, AND MONITORING REQUIREMENTS
1. Particulate Matter Emissions	(1) 0.60 pounds per million Btu heat input to the stack. [s. NR 415.06(1)(a), Wis. Adm. Code]	(1) Natural gas and #2 fuel oil are the only fuels that may be fired in this boiler.[1] [ss. NR 407.09(1)(c)1.b., Wis. Adm. Code and 144.394(3) and 144.393(1)(a), Wis. Stats.]	(1) Reference Test Method for Particulate Matter Emissions: Whenever compliance emission testing is required, US EPA Method 5, including condensible backhalf emissions, shall be used to demonstrate compliance. [s. NR 439.06(1), Wis. Adm. Code] (2) The permittee shall retain on site, plans and specifications of the boiler.[2] [s. NR 439.04(1)(d), Wis. Adm. Code]
2. Sulfur Dioxide	(1) The sulfur content of the #2 fuel oil used may not exceed 0.5 percent by weight. [s. NR 418.03(1)(c)1., Wis. Adm. Code]	(1) For each shipment of #2 fuel oil received, the permittee shall require sampling and analysis for the sulfur content of the #2 fuel oil. [s. NR 407.09(1)(c)1.b., Wis. Adm. Code]	(1) Reference Test Method for Sulfur Dioxide Emissions: Whenever compliance emission testing is required, US EPA Method 6 shall be used to demonstrate compliance. [s. NR 439.06(2)(a), Wis. Adm. Code] (2) Reference Test Method for Sulfur Content in Liquid Fossil Fuel: Whenever the sulfur content of a liquid fossil fuel sample is require, it shall be determined according to ASTM D129-91, Standard Test Method for Sulfur in Petroleum Products (General Bomb Method), ASTM D1552-90, Standard Test Method for Sulfur in Petroleum Products (High-Temperature Method), or ASTM D4294-90, Standard Test Method for Sulfur in Petroleum Products by Energy-Dispersive X-ray Fluorescence Spectroscopy. [s. NR 439.08(2)(b), Wis. Adm. Code] (3) The permittee shall keep records of the sulfur content in percent by weight of each batch of #2 fuel oil received. [s. NR 439.04(1)(d), Wis. Adm. Code]

[1] Because the maximum theoretical emissions while firing these fuels are less than the allowable limit of 0.60 pounds per million Btu heat input, limiting the types of fuels used is adequate to demonstrate compliance with the particulate matter emission limit. Maximum theoretical particulate matter emissions were calculated using an emission factor of 2.0 pounds per thousand gallons of #2 fuel oil fired from AP-42.

[2] These plans and specifications are sufficient because the boilers are designed to only burn natural gas and #2 fuel oil

(EPA note: Excerpt from American Packaging Corporation - Issued December 1, 1995. Additional testing and reporting requirements are included in Section F., Testing and Reporting Requirements Applicable to the Entire Facility, and Part II, General Permit Conditions.)

A: S01/P01: Packaging Rotogravure Press "Roto #1"; installed 1973. AND S01/P02: Packaging Rotogravure Press "Roto #2"; installed 1977. [continued]

POLLUTANTS	a. LIMITATIONS	b. COMPLIANCE DEMONSTRATION	c. REFERENCE TEST METHODS, RECORDKEEPING AND MONITORING
2. Volatile Organic Compounds - Laminator	(1) No owner or operator of a paper coating line may cause, allow or permit the emissions of any VOCs in excess of 2.9 lb/gal, excluding water, delivered to each coating applicator. [s. NR 422.07(2), Wis. Adm. Code]	(1) The MSDS for each adhesive shall be maintained by the facility to demonstrate the VOC content. [s. NR 407.09(1)(c), Wis. Adm. Code] (2) Where incineration is used to meet the requirements of A.2.a.(1), the capture system must be sufficient to meet the limitation following this equation: $E = \left[\sum AiBiCi \right] / Di$ where: E = the total allowable daily emissions of VOCs in pounds from all coatings subject to the same numerical emission limitation and applied on the controlled line i = the subscript denoting an individual coating Ai = the allowable emission rate for the coatings, in A.2.a.(1), in pounds per gallon of coating, excluding water, as delivered to the applicator Bi = the amount of coating material in gallons, delivered to the applicator during the actual production day Ci = the volume fraction of solids in the coating delivered to the applicator during the actual production day Di = the theoretical volume fraction of solids in the coating necessary to meet the allowable emission rate in A.2.a.(1), calculated from: $Di = 1 - [Ai/Pi]$ where: Pi = the density of the VOC used in the coating delivered to the applicator during the actual production day in pounds per gallon. If the coating does not contain any VOCs, or if the actual density cannot be demonstrated by the owner or operator, a value of 7.36 lb/gal shall be used for P. [s. NR 422.04(4), Wis. Adm. Code]	(1) Whenever VOC content testing is required, USEPA Method 24 shall be used. [s. NR 439.06(3)(b), Wis. Adm. Code] (2) Whenever VOC based coatings are used at the laminator, records shall be kept on a daily basis that include: (a) A unique identification for each of the coatings applied to paper. (b) The allowable emission rate for the coatings, in A.2.a.(1), in pounds per gallon of coating, excluding water, as delivered to the applicator. (c) The VOC content of each coating or solvent in units of pounds per gallon excluding water, when applied to paper. (d) The amount of coating and solvent, in gallons, delivered to the applicator. (e) The volume fraction of solids in the coating delivered to the applicator. (f) The total allowable emissions as calculated under A.2.b.(2). (g) The actual emissions for those coatings for which allowable emissions were calculated under A.2.b.(2). [s. NR 439.04(5)(e)1-6, Wis. Adm. Code]

THE FOLLOWING TERMS & CONDITIONS WILL AUTOMATICALLY APPEAR IN EACH PERMIT TO INSTALL.

GENERAL PERMIT CONDITIONS

TERMINATION OF PERMIT TO INSTALL

Substantial construction for installation must take place within 18 months of the effective date of this permit. This deadline may be extended by up to 12 months, if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.

NOTICE OF INSPECTION

The Director of the Ohio Environmental Protection Agency, or his authorized representatives, may enter upon the premises of the above-named applicant during construction and operation at any reasonable time for the purpose of making inspections, conducting tests, or to examine records or reports pertaining to the construction, modification or installation of the source(s) of environmental pollutants identified within this permit.

CONSTRUCTION OF NEW SOURCE(S)

The proposed source(s) shall be constructed in strict accordance with the plans and application submitted for this permit to the Director of the Ohio Environmental Protection Agency. There may be no deviation from the approved plans without the express, written approval of the Agency. Any deviations from the approved plans or the above conditions may lead to such sanctions and penalties as provided under Ohio law. Approval of these plans does not constitute an assurance that the proposed facilities will operate in compliance with all Ohio laws and regulations. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed sources are inadequate or cannot meet applicable standards.

If the construction of the proposed source(s) has already begun or has been completed prior to the date the Director of the Ohio Environmental Protection Agency approves the permit application and plans, the approval does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the approved plans. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of Ohio Administrative Code (OAC) Rule 3745-31-02. Furthermore, issuance of the Permit to Install does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Approval of the plans in any case is not to be construed as an approval of the facility as constructed and/or completed. Moreover, issuance of the Permit to Install is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the

effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities prove to be inadequate or cannot meet applicable standards.

PERMIT TO INSTALL FEE

In accordance with OAC Rule 3745-45-04, the specified Permit to Install fee must be remitted within 15 days of the effective date of this permit to install.

PUBLIC DISCLOSURE

The facility is hereby notified that this permit, and all agency records concerning the operation of this permitted source, are subject to public disclosure in accordance with OAC Rule 3745-49-03.

APPLICABILITY

This Permit to Install is applicable only to the contaminant sources identified. Separate application must be made to the Director for the installation or modification of any other contaminant sources.

BEST AVAILABLE TECHNOLOGY

As specified in OAC Rule 3745-31-05, all new sources must employ Best Available Technology (BAT). Compliance with the terms and conditions of this permit will fulfill this requirement.

TERMS AND CONDITIONS FOR AIR CONTAMINANT SOURCES

PERMIT TO OPERATE APPLICATION

A Permit to Operate application and a $15 application fee must be submitted to the appropriate field office for each air contaminant source in this Permit to Install. In accordance with OAC Rule 3745-35-02, the application shall be made at least 90 days prior to start-up of the source.

THE FOLLOWING TERM AND CONDITION MUST BE COMPLETED FOR EACH PTI. THIS CONDITION DOES NOT HAVE TO BE TYPED AS LONG AS THE HANDWRITING IS LEGIBLE. ILLEGIBLE HANDWRITTEN TERMS AND CONDITIONS WILL BE RETURNED FOR DETAILED INSTRUCTIONS ON COMPLETION OF THIS CONDITION, PLEASE SEE SEPARATE INSTRUCTION SHEET.

PLEASE US THE FOLLOWING ACRONYMS:

Carbon monoxide (CO)
Total Suspended Particulate (TSP)
Particulate Matter less than 10 microns PM_{10}
Particulate Matter (PM)
Volatile Organic Compounds (VOC)
Organic Compounds (OC)
Hydrocarbons (HC)
Nitrogen Oxides (NO_x)
Sulfur Dioxide (SO_2)
Lead (Pb)

YOU MUST DEFINE ANY OTHER ACRONYMS THAT YOU USE.

AIR EMISSION SUMMARY

The air contaminant sources listed below comprise the Permit to Install for _____ located in _____ _____ County. The sources listed below shall not exceed the emission limits/control requirements contained in the table. This condition in no way limits the applicability of any other state or federal regulations. Additionally, this condition does not limit the applicability of additional special terms and conditions of this permit.

Ohio EPA Source No.	Source Identification/ Description	BAT Determination	Applicable Federal and OAC Rules	Permit Allowable Mass Emissions an Control & Usage Requirements
			3745-31-05	

SUMMARY
TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

Pollutant	Tons/Year

FOR THE REMAINING STANDARDIZED TERMS AND CONDITIONS, PLEASE SELECT & CIRCLE THOSE WHICH ARE APPLICABLE OR THOSE YOU WISH TO INCLUDE. YOU DO NOT NEED TO USE CONDITION NO. 1 WITH CONDITIONS NO. 2 & NO. 3A OR 3B UNLESS MULTIPLE SCHEDULES ARE NEEDED.

1. CONSTRUCTION STATUS

The _____ shall be notified in writing as to (a) the construction starting date, (b) the construction completion date, and (c) the date the facilities were placed into operation for the following sources _____.

2. NSPS REQUIREMENTS

The following sources are subject to the applicable provisions of the New Source Performance Standards (NSPS) as promulgated by the United States Environmental Protection Agency, 40 CFR Part 60.

Source No.	Source Description	NSPS Regulation (Subpart)

The application and enforcement of these standards are delegated to the Ohio EPA. The requirements of 40 CFR Part 60 are also federally enforceable.

Pursuant to the NSPS, the source owner/operator is hereby advised of the requirement to report the following at the appropriate times:

1. Construction date (no later than 30 days after such date);
2. Anticipated start-up date (not more than 60 days or less than 30 days prior to such date);
3. Actual start-up date (within 15 days after such date); and
4. Date of performance testing (at least 30 days prior to testing).

Reports are to be sent to:

Ohio Environmental Protection Agency
Authorization and Compliance Unit
P.O. Box 1049
Columbus, Ohio 43266-0149

and (_____.
insert correct field office

3A. NESHAP REQUIREMENTS

The following source(s) are subject to the applicable provisions of the National Emission Standards for Hazardous Air Pollutants (NESHAP) as promulgated by the United States Environmental Protection Agency under 40 CFR Part 61.

Source No.	Source Description	NESHAP Regulation

The application and enforcement of these standards are delegated to Ohio EPA. The requirements of 40 CFR Part 61 are also federally enforceable.

Pursuant to the NESHAP, the source owner/operator is required to report the following milestones;

1. Date of commencement of construction (no later than 30 days after such date);
2. Anticpated date of initial start-up (not more than 60 days or less than 30 days prior to such date);
3. Actual date of initial start-up (within 15 days after such date); and
4. Date of performance testing (at least 30 days prior to testing).

Reports are to be sent to:

Ohio Environmental Protection Agency
Division of Air Pollution Control
Authorization and Compliance Unit
P. O. Box 1049
Columbus, Ohio 43266-0149

and

_____
insert correct field office

3B. RADIONUCLIDES NESHAP REQUIREMENTS

The following source(s) are subject to the applicable provisions of the National Emission Standards for Hazardous Air Pollutants (NESHAP) as promulgated by the United States Environmental Protection Agency under 40 CFR Part 61.

Source No.	Source Description	NESHAP Regulation
		Subpart H

The application and enforcement of these standards are performed by the United States Environmental Protection Agency.

Pursuant to the NESHAP, the source owner/operator is required to report the following milestones;

1. Date of commencement of construction (no later than 30 days after such date);
2. Anticpated date of initial start-up (not more than 60 days or less than 30 days prior to such date);
3. Actual date of initial start-up (within 15 days after such date); and
4. Date of performance testing (at least 30 days prior to testing).

Reports are to be sent to:

United States Environmental Protection Agency
David Kee
Air & Radiation Branch (5AR-26)
230 S. Dearborn St.
Chicago, IL 60604

Ohio Environmental Protection Agency
Division of Air Pollution Control
Authorization and Compliance Unit
P. O. Box 1049
Columbus, Ohio 43266-0149

insert correct field office

FOR TERM & CONDITION NO. 4, ITEMS "C" & "D" ARE OPTIONAL AND SHOULD BE CIRCLED IF YOU WISH THEM INCLUDED.

4. PERFORMANCE TEST REQUIREMENTS

The permittee shall conduct, or have conducted, performance testing on the air contaminant source(s) in accordance with procedures approved by the Agency. Two copies of the written report shall be submitted and signed by the person responsible for the test, describing the test procedures followed and the results of such tests. The Director, or an Ohio EPA representative, shall be allowed to witness the tests, examine testing equipment, and require the acquisition or submission of data and information necessary to assure that the source operation and testing procedures provide a valid characterization of the emissions from the source and/or the performance of the control equipment.

A. A completed Intent to Test form shall be submitted to the appropriate Ohio EPA District Office or Local Air Pollution Control Agency where the original permit application was filed. This notice shall be made 30 days in advance and shall specify the source operating parameters, the proposed test procedures and the time, date, place and person(s) conducting such tests.

B. Two copies of the test results shall be submitted within 30 days after the completion of the performance test.

C. (Optional) Tests shall be performed for the following sources and pollutants:

SOURCE	POLLUTANT(S)

D. (Optional) The facility will be permitted to operate during a 90-day period in accordance with OAC Rule 3745-35-02(C)(4)(b). The purpose of this period of operation is to fulfill the performance tests conditions used in the determination of compliance with the provisions of this Permit to Install or other applicable Ohio EPA rules.

5. MONITORING REQUIREMENTS

A _____ monitor shall be installed on the _____. The monitoring equipment shall be installed and maintained in accordance with the applicable portions of 40 CFR Part 60 - Standards of Performance for New Stationary Sources.

Within 30 days after the installation of the continuous monitoring and recording equipment, this facility shall conduct a performance specification test of such equipment pursuant to Section 3704.03(I) of the Ohio Revised Code and 40 CFR Part 60, Appendix B, Performance Specification Test 1. Personnel from the Ohio EPA field office shall be permitted to witness the performance specification test, and two copies of the test results shall be submitted to the Ohio EPA field office within 45 days after the test is completed.

Pursuant to 40 CFR Parts 60.7 and 60.13(h), this facility shall submit reports on a quarterly basis to the Ohio EPA field office documenting all instances of opacity values in excess of the limitations specified in OAC rule 3745-17-07 or any limitations specified in the terms and conditions of this permit. These quarterly excess emission reports shall be submitted by February 15, May 15, August 15 and November 15 of each year and shall cover the data obtained during the previous calendar quarters.

6. PSD REQUIREMENTS

The source described in this Permit to Install is subject to the applicable provisions of the Prevention of Significant Deterioration (PSD) regulations as promulgated by the United States Environmental Protection Agency 40 CFR 52.21. The authority to apply and enforce the PSD regulations has been delegated to the Ohio Environmental Protection Agency. The terms and conditions of this permit and the requirements of the PSD regulations are also enforceable by the United States

Environmental Protection Agency.

In accordance with 40 CFR 124.15, 124.19 and 124.20, the followi shall apply: (1) the effective date of this permit shall be 30 days after the service of notice to any public commentors of the final decision to issue, modify, or revoke and re-issue the permit unless the service of notice is by mail, in which case the effective date of the permit shall be 33 days after the service of notice; and (2) if an appeal is made to the Administrator of the United States Environmental Protection Agency, the effective date of the permit is suspended until such time as the appeal is resolved or denied.

7 APPENDIX S - EMISSION OFFSET INTERPRETATIVE RULING

The source described in this Permit to Install is subject to the applicable provisions of the Interpretative Ruling on Emission Offsets by United States Environmental Protection Agency, 40 CFR 51, Appendix S. The terms and conditions of this permit and the requirements of the Interpretative Ruling are also enforceable by the United States Environmental Protection Agency.

8. RECORD(S) RETENTION AND AVAILABILITY

All records required by this Permit to Install shall be retained on file for a period of not less than two years unless otherwise indicated by Ohio Environmental Protection Agency. All records shall be made available to the Director, or any authorized representative of the Director, for review during normal business hours.

9. REPORTING REQUIRMENTS

Unless otherwise specified, reports required by the Permit to Install need only be submitted to (_____).
insert field office

10. WASTE DISPOSAL

The owner/operator shall comply with any applicable state and federal requirements governing the storage, treatment, transport and disposal of any waste material generated by the operation of the sources.

11. MAINTENANCE OF EQUIPMENT

This source and its associated air pollution control system(s) shall be maintained regularly in accordance with good engineering practices and the recommendations of the respective manufacturers in order to minimize air contaminant emissions.

12. MALFUNCTION/ABATEMENT

In accordance with OAC Rule 3745-15-06, any malfunction of the source(s) or associated air pollution control system(s) shall be reported immediately to the (_____).
insert field office

Except as provided by OAC Rule 3745-15-06(A)(3), scheduled maintenance of air pollution control equipment that requires the shutdown or bypassing of air pollution control system(s) must be accompanied by the shutdown of the associated air pollution sources.

13. AIR POLLUTION NUISANCES PROHIBITED

The air contaminant source(s) identified in this permit may not cause a public nuisance in violation of OAC rule 3745-15-07.

TERMS AND CONDITIONS FOR SPECIFIC SOURCE CATEGORIES

This part contains special terms and conditions for the following types of sources:

1) GASOLINE DISPENSING FACILITIES
2) DIESEL AND/OR KEROSENE DISPENSING FACILITIES
3) GASOLINE DISPENSING OPERATIONS
4) MISCELLANEOUS STORAGE TANKS
5) NEW SOURCE PERFORMACE STANDARD SUBPART Kb (A&B)
6) BAT FOR OPEN TOP VAPOR DEGREASERS
7) BAT FOR COLD CLEANERS
8) BAT FOR CONVEYORIZED DEGREASERS
9) NOTICE OF INTENT TO RELOCATE

TERMS AND CONDITIONS FOR SPECIFIC SOURCE CATEGORIES

IN A FEW INSTANCES, AN APPLICATION FOR A NUMBER OF SOURCES WILL INCLUDE GASOLINE/DIESEL/KEROSENE DISPENSING. FOR THOSE CASES, CONDITIONS NO. 14 & NO. 15 MAY BE APPLICABLE.

14. GASOLINE DISPENSING FACILITIES

BAT for any gasoline dispensing operation identified within this permit consists of the use of Stage I vapor balance system. The vapor balance system shall be designed and operated to route at least 90% by weight of the organic compounds in the displaced vapors from the storage tanks to the delivery vessel and shall be equipped with a means to prevent the discharge into the atmosphere of displaced vapors from an unconnected vapor line. This shall be used at all times when filling the tanks.

The transfer of gasoline from a delivery vessel to a stationary storage tank shall be conducted by use of submerged fill into the storage tank. The submerged fill pipe(s) are to be installed so they are within six (6) inches of the bottom of the storage tank.

This facility shall be serviced by a bulk gasoline plant or terminal that is in compliance with OAC Rule 3745-21-09(P) or (Q), respectively.

There shall be no leaks in the vapor and liquid lines during the transfer of gasoline.

All fill caps shall be "in place" and clamped during normal storage conditions.

The gasoline dispensing facility shall repair within 15 days any leaks from the vapor balance system which is employed to meet the requirements of Paragraph (A)(3) of OAC Rule 3745-31-05 or Paragraph (R)(1) of OAC Rule 3745-21-09 when such leaks are equal to or greater than 100% of the lower explosive limit of propane, as determined under Paragraph (K) of OAC Rule 3745-21-10.

15. DIESEL AND/OR KEROSENE DISPENSING FACILITIES

BAT for any diesel and/or kerosene dispensing operation identified within this permit consists of the transfer of diesel and/or kerosene from a delivery vessel to a stationary storage tank through the use of submerged filling into the storage tank. The submerged fill pipe(s) are to be installed so they are within six (6) inches of the bottom of the storage tank.

IN RARE INSTANCES, BAT FOR A GDF MAY BE SUBMERGED FILLING ONLY. IN SUCH CASES, CONDITION NO. 16 SHOULD BE USED. DO NOT USE THIS CONDITION IN CONJUNCTION WITH CONDITION NO. 14.

16. GASOLINE DISPENSING OPERATIONS

BAT for the gasoline dispensing operation identified within this permit consists of the transfer of gasoline from a delivery vessel to a stationary storage tank through the use of submerged filling into the storage tank and the restriction of annual throughput to _____ gallons of gasoline per year. The submerged fill pipe(s) are to be installed so they are within six (6) inches of the bottom of the storage tank.

MISCELLANEOUS STORAGE TANKS

Unless otherwise indicated, BAT for any miscellaneous storage tanks identified within this permit consists of the use of submerged fill into the storage tanks. The submerged fill pipe(s) are to be installed within six (6) inches of the bottom of the storage tank.

THE FOLLOWING TERM AND CONDITION IS APPLICABLE TO THOSE SOURCES SUBJECT TO THE NSPS SUBPART Kb RECORD REQUIREMENTS ONLY. CHOOSE ONLY ONE FOR EACH TANK. CONDITION NO. 2 IS NOT REQUIRED FOR THESE SOURCES.

NEW SOURCE PERFORMANCE STANDARD SUBPART Kb

The application and enforcement of the provisions of the New Source Performance Standards (NSPS), as promulgated by the United States Environmental Protection Agency, 40 CFR Part 60, are delegated to the Ohio Environmental Protection Agency. The requirements of 40 CFR Part 60 are also federally enforceable.

In accordance with 40 CFR 60.116b(a) and (b), the owner and operator of storage vessel(s) _____ [insert source number(s)] shall keep readily accessible records showing the dimension of each storage vessel and an analysis showing the capacity of each storage vessel for the life of each source.

NEW SOURCE PERFORMANCE STANDARD SUBPART Kb

The application and enforcement of the provisions of the New Source Performance Standards (NSPS), as promulgated by the United States Environmental Protection Agency, 40 CFR Part 60, are delegated to the Ohio Environmental Protection Agency. The requirements of 40 CFR Part 60 are also federally enforceable.

In accordance with 40 CFR 60.116b(a) and (b), the owner and operator of storage vessel(s) _____ [insert source number(s)] shall:

a. Keep readily accessible records showing the dimension of each storage vessel and an analysis showing the capacity of each storage vessel for the life of each source; and

b. Maintain a record of the volatile organic liquid (VOL) stored, the period of storage, and the maximum true vapor pressure of that VOL during the respective storage period. Records shall be retained for a minimum of two years.

19. BAT FOR OPEN TOP VAPOR DEGREASERS

In accordance with OAC Rule 3745-21-09(O)(3), each owner or operator of an open top vapor degreaser shall:

(a Equip the open top vapor degreaser with a cover that can be opened and closed easily without disturbing the vapor zone;

(b) Install the following safety switches:

(i a condenser flow switch and thermostat or any other device which shuts off the sump heat if the condenser is either not circulating or too warm;

(ii a spray safety switch which shuts off the spray pump if the vapor level drops below any fixed spray nozzle;

iii) a vapor level control thermostat or any other device which shuts off the sump heat when the vapor level rises too high; and

(iv a water flow switch, water pressure switch or any other device which shuts off the sump heat if the water in a water-cooled condenser has no flow or no pressure, whichever is being monitored.

Install one of the following devices:

(i a freeboard with a freeboard ratio greater than or equal to 0.75, and if the open top vapor degreaser opening is greater than 10 square feet, the cover must be powered or equipped with mechanical features whereby it can be readily closed when the degreaser is not in use;

ii refrigerated chiller;

iii) enclosed design (cover or door opens only when the dry part is actually entering or exiting the open top vapor degreaser);

iv carbon adsorption system, with ventilation greater than or equal to 50 cubic feet per minute per square foot of air/solvent interface (when cover is open), and exhausting less than 25 parts per million (ppm) of solvent averaged over one complete adsorption cycle; or

(v) a control system, demonstrated to have control efficiency equivalent to or greater than any of the above, and approved by the Director; and

Operate and maintain the open top vapor degreaser in a manner which is consistent with good engineering practice and which minimizes solvent evaporation from the unit.

20. <u>BAT FOR COLD CLEANERS</u>

In accordance with OAC Rule 3745-21-09(O)(2), each owner or operator of a cold cleaner shall:

a) Equip the cold cleaner with either

(i a cover, and if the solvent has a vapor pressure greater than 0.3 pound per square inch absolute measured at 100°F or the solvent is heated or agitated, the cover shall be signed and constructed so that it can be easily operated with one hand; or

(ii a remote solvent reservoir from which solvent is pumped through a nozzle suspended over a sink-like work area which drains back to the reservoir, provided a sink-like area has an open drain area of less than 16 square inches and provided the solvent neither is heated above 120°F nor has a vapor pressure greater than 0.6 pound per square inch absolute, measured at 100°F;

b) Equip the cold cleaner with a device for draining the clean parts; and if the solvent has a vapor pressure greater than 0.6 pound per square inch absolute, measured at 100°F the drainage facility shall be constructed internally so that parts are enclosed under the cover during draining unless an internal type drainage device cannot fit into the cleaning system;

Install one of the following devices if the solvent vapor pressure is greater than 0.6 pound per square inch absolute measured at 100°F, or if the solvent is heated above 120°F;

(i) freeboard that give a freeboard ratio greater than or equal to 0.7;

ii) water cover (solvent must be insoluble in and heavier than water); or

iii) other systems of equivalent control, such as refrigerated chiller or carbon adsorption, approved by the Director; and

Operate and maintain the cold cleaner in a manner which is consistent with good engineering practice and which minimizes solvent evaporation from the unit.

21. <u>BAT FOR CONVERYORIZED DEGREASERS</u>

In accordance with OAC Rule 3745-21-09(O)(4 , each owner or operator of a conveyorized degreaser:

(a) Install one of the following devices on all conveyorized degreasers having an air/solvent interface greater than 22 square feet:

i refrigerated chiller;

ii carbon adsorption system, with ventilation greater than or equal to 50 cubic feet per minute per square foot of air/solvent interface (when downtime covers are open), and exhausting less than 25 parts per million (ppm) of solvent by volume averaged over a complete adsorption cycle; or

(iii a system, demonstrated to have a control efficiency equivalent to or greater than Paragraph (O)(4)(a)(i) or (O)(4)(a)(ii) of this Rule, and approved by the Director;

Equip the conveyorized degreaser with equipment, such as a drying tunnel or rotating (tumbling) basket, sufficient to prevent cleaned parts from carrying out solvent liquid or vapor;

Install one of the following safety switches, if the solvent is heated to its boiling point:

(i a condensor flow switch and thermostat or any other device which shuts off the sump heat if the condensor coolant is either not circulating or too warm;

ii) a spray safety switch which shuts off the spray pump if the vapor level drops below any fixed spray nozzle; and

iii a vapor level control thermostat or any other device which shuts off the sump heat when the vapor level rises too high;

Equip the conveyorized degreaser with covers for closing off the entrance and exit when not in use; and

Operate and maintain the conveyorized degreaser in a manner which is consistent with good engineering practice and which minimizes solvent evaporation from the unit.

22. NOTICE OF INTENT TO RELOCATE

Pursuant to OAC Rule 3745-31-05(A)(6), the owner or operator of the portable or mobile source identified within this Permit to Install may relocate within the state of Ohio without first obtaining a Permit to Install providing the following criteria are met:

a. The source is equipped with the Best Available Control Technology for such source; and

b. The source is operating pursuant to a currently effective Permit to Operate; and

c. The applicant has provided proper notice of intent to relocate the source to the Director within a minimum of 30 days prior to the scheduled relocation; and

d. In the Director's judgement, the proposed site is acceptable under Rule 3745-15-07 of the Administrative Code.

In order for the Director to determine compliance with all of th above criteria, the owner or operator of the portable or mobile source must file a "Notice of Intent to Relocate" at least 30 days prior to relocation of the source with the [Insert field office]. Upon receipt of the notice, the Director, or the Director's authorized representative, will evaluate the request in accordance with the above criteria.

Failure to submit said notification and to receive Ohio Environmental Protection Agency approval prior to relocation of the source may result in fines and civil penalties.

OEPA inter-office communication

to: DISTRIBUTION date: 12/18/95

from: Mike Hopkins, AQM&P

subject: PTI for sources that will become "permit-by-rule" exemptions

As you may know, Ohio EPA will be proposing new revisions to OAC Chapter 3745-31 in the near future. These changes will be far reaching, as they will include essentially the PSD and new source nonattainment area federal requirements.

In addition, they will include a few new exemptions and a permit-by-rule procedure for certain groups of sources. Attached to this IOC is the current language proposed to JCARR with the rules package.

We have decided that it would be beneficial to hold off on processing any PTIs for sources that will meet the criterial of the exemption or permit-by-rule exemption (see below). Therefore, if you have or receive any applications for sources that will qualify (presuming this rule goes through unchanged), we are asking that you not process them any further, and just keep them at your office until further notice (or until the rule is final).

You should contact the applicant to let them know what is going on. A letter to let them know would be appropriate. Attached is a sample letter that can be used. If they are in urgent need of a PTI, and cannot wait five months or so, then please proceed with the permitting.

As an example, we know that many Ameritech generator PTI applications have arrived at the Districts and Locals. We believe that these can be held until the rule is final.

If you have any questions about this, please contact me. Thank you.

DISTRIBUTION

Gerry Rich, NWDO
Don Waltermeyer, NWDO
Sam Araj, NWDO
Fred Klingelhafer, SEDO
Glen Greenwood, SEDO
Brad Miller, Cincinnatti
Don Walden, Portsmouth
Harold Strohmeyer, NOVAA

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Bill Garber, TDOES
Robert Kossow, TDOES
Curt Marshall, RAPCA
Tim Wilson, RAPCA

cc: Clara Dailey, PMU
Sara Geary, PMU
Alan Lloyd, AQM&P
Jim Orlemann, Engineering
Misty Parsons, AQM&P
Tom Rigo, FO

MH/MP

Permit-By-Rule draft language

(A) A permit to install as required by rule 3745-31-02 of the Administrative Code must be obtained for the installation or modification of a new air contaminant source unless exempted from the requirements AS FOLLOWS:

(1 Permanent exemptions:

THE FOLLOWING EXEMPTIONS DO NOT APPLY TO A COMBINATION OF COMMON EMISSIONS UNITS THAT ARE A MAJOR STATIONARY SOURCE OR MAJOR MODIFICATION, OR TO EMISSIONS UNITS THAT THE NATIONAL EMISSIONS STANDARDS FOR HAZARDOUS AIR POLLUTANTS APPLIES (EXCEPT FOR SUBPART M, ASBESTOS REMOVAL ACTIVITIES), OR TO EMISSIONS UNITS THAT THE NEW SOURCE PERFORMANCE STANDARDS APPLIES (EXCEPT FOR SUBPART AAA, RESIDENTIAL WOOD HEATERS).

(a) Fossil fuel-fired boilers, preheaters, air heaters, water heaters, or heaters used for other heat exchange media less than ~~one~~ TEN million British thermal units per hour burning only natural gas, distillate oil (with less than or equal to 0.5 per cent by weight sulfur), or liquid petroleum gas.

~~Notwithstanding the above exemptions, any emissions unit regulated under the National Emissions Standards for Hazardous Pollutants and/or the New Source Performance Standards shall apply for and obtain a permit to install prior to construction of the new source.~~NATURAL GAS COMPRESSOR ENGINES USED FOR MAINTENANCE ACTIVITIES WITH A HEAT INPUT RATE OF NO GREATER THAN 10 MILLION BRITISH THERMAL UNITS PER HOUR FIRED BY NATURAL GAS, GASOLINE OR DISTILLATE OIL (WITH LESS THAN OR EQUAL TO 0.5 PERCENT BY WEIGHT SULFUR).

EMERGENCY ELECTRICAL GENERATORS OR EMERGENCY FIREFIGHTING WATER PUMPS LESS THAN OR EQUAL TO 20 HORSEPOWER THAT BURN GASOLINE, NATURAL GAS, DISTILLATE OIL (WITH LESS THAN OR EQUAL TO 0.5 PER CENT BY WEIGHT SULFUR), OR LIQUID PETROLEUM GAS.

2-STROKE OR 4-STROKE, AIR-COOLED, GASOLINE-POWERED ENGINES NO MORE THAN 20 HORSEPOWER USED FOR LAWNMOWERS, SMALL ELECTRIC GENERATORS, COMPRESSORS, PUMPS, MINIBIKES, SNOWTHROWERS, GARDEN TRACTORS OR OTHER SIMILAR USES.

:2 FEDERAL BASED EXEMPTIONS

THE FOLLOWING EXEMPTION APPLIES REGARDLESS OF THE APPLICABILITY OF THE NATIONAL EMISSIONS STANDARDS FOR HAZARDOUS AIR POLLUTANTS AND/OR THE NEW SOURCE PERFORMANCE

STANDARDS.

~~(nn)~~ (A) Cleanup activities associated with the removal or remedial action conducted entirely on site, ~~whre~~ WHERE such remedial action is selected and carried out in compliance with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) section 121 (e) and where such action meets all applicable air pollution emission limits and policies.

~~(2)~~ (3 Discretionary exemptions

The director may, at his discretion, exempt the installation of an air contaminant source or any other source associated with the clean-up of a spill or A leaking underground storage tank from the requirements to obtain a permit to install.

The director ~~may~~, at his discretion, MAY exempt the installation of an air contaminant source from the requirements to obtain a permit to install to deal with an emergency situation involving immediate threats to human health, property or the environment.

(c The director ~~may~~, at his discretion, MAY exempt the installation of an air contaminant source from the requirements to obtain a permit to install for the emergency replacement of storage tanks associated with A leaking underground storage tank for a period not to exceed six months.

(d) The director ~~may~~, at his discretion and in writing, MAY exempt the installation or modification of an air contaminant source from the ~~requirements~~ REQUIREMENT to obtain a permit to install ~~fro~~ FOR a period of up to six months for purposes of research and development of more effective prevention or control of air pollutant emissions or of more efficient combustion of coal.

(e) A temporary source ~~which~~ THAT, as so ordered by the director at his discretion, is to be operated for the purpose of testing air contaminant pollution emissions so that a suitable control technology can be ascertained and will not operate for more than two calendar years.

(f The director ~~may~~, at his discretion and in writing, MAY exempt the temporary modification of an air contaminant source from the requirements to obtain a permit to install for a period of up to sixty days for the purpose of evaluating new production feasibility and/or air quality impacts from the temporary modification. ~~Such requests~~ A REQUEST for this exemption shall be made in writing and shall provide a detailed description of the proposed temporary modification to the AIR CONTAMINANT source, the time period over which the modification will occur, any changes in air

emissions from the AIR CONTAMINANT source as a result of the temporary modification, and the ambient impact of the emissions from the AIR CONTAMINANT source as a result of the temporary modification. The director may require that performance tests be conducted during the period of the temporary modification.

The director ~~may~~, at his discretion and in writing, MAY exempt any treatability studies or on-site ~~resopnse~~ RESPONSE actions (cleanup operations) that meet all applicable air emission limits and policies from the requirement to obtain a permit to install. Anyone requesting this exemption must provide the director with sufficient information to make this decision.

(4) PERMIT-BY-RULE EXEMPTIONS

THE FOLLOWING AIR CONTAMINANT SOURCES ARE EXEMPT FROM THE REQUIREMENT TO OBTAIN A PERMIT TO INSTALL. THESE EXEMPTIONS ARE VALID ONLY AS LONG AS THE OWNER OR OPERATOR COLLECTS AND MAINTAINS THE RECORDS DESCRIBED FOR EACH AIR CONTAMINANT SOURCE EXEMPTED UNDER THIS RULE AND THESE MONTHLY RECORDS ARE RETAINED IN THE OWNER OR OPERATOR'S FILES FOR A PERIOD OF NOT LESS THAN FIVE YEARS AND ARE MADE AVAILABLE TO THE DIRECTOR OR ANY AUTHORIZED REPRESENTATIVE OF THE DIRECTOR FOR REVIEW DURING NORMAL BUSINESS HOURS:

EMERGENCY ELECTRICAL GENERATORS OR EMERGENCY FIREFIGHTING WATER PUMPS GREATER THAN 20 HORSEPOWER THAT OPERATE FOR NO MORE THAN 500 HOURS PER ROLLING 12 MONTH PERIOD AND THAT BURN GASOLINE, NATURAL GAS, DISTILLATE OIL (WITH LESS THAN OR EQUAL TO 0.5 PER CENT BY WEIGHT SULFUR), OR LIQUID PETROLEUM GAS AND THAT MAINTAIN THE FOLLOWING RECORDS:

(I) MONTHLY RECORDS THAT CONTAIN THE ROLLING TWELVE MONTH HOURS OF OPERATION; AND

(II) RECORDS THAT SHOW THE TYPE OF FUEL USED AND THE SULFUR CONTENT (IN PER CENT BY WEIGHT) OF ANY DISTILLATE OIL USED.

SAMPLE EMERGENCY GENERATOR PERMIT LETTER
(To use when holding permit applications
for future exemption by rule)

Dear applicant:

We have received your permit to install (PTI) application for an _____. Ohio EPA has proposed rule changes to the state legislature in November 1995. Among these changes to the permit rules will be the addition of new permanent exemptions and a permit-by-rule exemption for small generators. The proposed exemptions are as follows:

Natural gas compressor engines for maintenance with a heat input no greater than 10 mmbtu/hr fueled by natural gas, gasoline or distillate oil (0.5 % sulfur).

Emergency generators (electrical or firefighting) no greater than 20 HP burning gasoline, natural gas, or distillate oil (0.5 % sulfur), or LPG

Two or four stroke air-cooled gasoline-powered engines no more than 20 HP used for small generators, compressors or pumps.

The proposed permit-by-rule exemptions are as follows, as long as the owner/operator collects and maintains certain records for 5 years for each source:

Emergency electrical generators or firefighting water pumps greater than 20 HP that operate no more than 500 hours/rolling 12 month period, that burn gasoline, natural gas, distillate oil (0.5 % sulfur by weight), or LPG. Records of total hours and fuel used must be kept.

Since it is anticipated that the source(s) will be exempt in the future, we plan to hold the permit application that you submitted until the rule is finalized. Then you will either no longer need to obtain a permit, due to the exemption, or, if a permit is needed, we will process your application.

If it is important to you to obtain a permit, please contact your District Office or Local Air Agency representative and ask them to process your permit.

If you have any questions, please contact us at

Sincerely:

_____

_____

OEPA inter-office communication

to: Jeanne Mallett, Legal date: 12/1/95

from: Mike Hopkins and Misty Parsons, MP AQM&P

subject: Holding PTI applications for sources that will exempt soon

We are preparing to advise the Field Offices to begin holding any applications that they receive for small sources that will be exempt with the rule changes. What originally prompted this was the receipt of 100 or so small emergency generator applications from Ameritech. They have no problem with waiting for the rule change.

However, we discussed this with Bob in the general sense, and he thinks we should hold off on processing all sources that should become exempt, unless the applicant desires a PTI now. We anticipate that the rule change would occur within six months or so.

We have prepared the attached IOC and sample letter for the Districts/Locals, but thought we should run this by you for your opinion as to whether or not we can legally, safely do this.

Please respond to us with your opinion in the near future, so that we can proceed. Thanks.

cc: Bob Hodanbosi, Chief

~~Attach~~

Please [illegible]

Jeanne said OK by P

Misty,
I would like to do
1 more thing before we
do this - check w/ Legal.
Then send a draft to Jeanne
and ask her if it is OK MH

Division of Air ***Pollution Control***
Inter-office **Communication**

TO: DO/LAA Supervisors ***DATE:*** May 23, 1994

FROM: Mike Hopkins, Manager-AQM&P

SUBJECT: Waste Oil Space Heaters - "De Minimus" exemption

Central Office has reviewed the emissions generated by waste oil space heaters (not greater than 500,000 Btu/hr maximum capacity) based on the emission factors published in U.S. EPA's AP-42 (Table 1.11-2 - please note that there were recent changes to this table included in the supplement F). Using the AP-42 emission factors our calculations show that uncontrolled emissions are less than ten lbs/day (for each of the pollutants generated) and the uncontrolled emission of hazardous air pollutants will be less than one ton per year.

Consequently, Central Office has determined that waste oil heaters (not greater than 500,000 Btu/hr) apparently qualify for the "De Minimus" exemption provided for under OAC Rule 3745-15-05.

Chapter 1.11 Waste oil combustion in AP-42 delineates waste oil according to the following: Waste oil includes used crankcase oils from automobiles and trucks, used industrial lubricating oils (such as metal working oils), and other used industrial oils (such as heat transfer fluids). Central Office would add to that list the following: 90 W. gear oil, automatic transmission fluid, and hydraulic oil generated by the maintenance of vehicles.

Central Office has determined that if the oil burned in the space heater falls under one of the categories listed above then the unit qualifies for the "De Minimus" exemption. At this point, there is no reason to believe that the burning of other types of fuel in these space heaters will generate emissions which exceed ten lbs/day. However, the burning of some waste oils (which do not fall under the categories listed above) may warrant a review of the emissions generated.

It appears that waste oil heaters not greater than 500,000 Btu/hr do not need permits. Before we issue this as a policy, we want your reaction, suggestions, or comments. Do you feel that there will be any problems with exempting these space heaters? Please submit your comments by no later than June 23, 1994.

If you have any questions please contact Jim Braun (DAPC, AQM&P) at (614)644-3617. Thank you for your cooperation in this matter

MH/JB

cc: Bob Hodanbosi, DAPC
Jim Orlemann, DAPC

OEPA inter-office communication

to: Bob Hodanbosi - Chief, DAPC date: 3/18/94

from: Jim LB Braun - AQM&P, NSR

subject: "De Minimus" exemption

Due to the recent inclusion of the "De Minimus" exemption in the Ohio Revised Code Section 3704.011, I have investigated the possibility that waste oil heaters fall under this exemption. I am only concerned with units which are not greater than 500,000 Btu/hr maximum capacity. I have contacted Mike Hamlin who is the U.S. EPA expert on AP 42 emission factors for waste oil combustion. Mr. Hamlin informed me that there was an error in the listing of emission factors in Table 1.11-2 of AP 42 for waste oil combustion. The units for NOx, SOx, and CO needed to be switched. After making this correction, my calculations indicate that these waste oil heaters do qualify for the exemption.

From the information submitted to me by the sales representatives for the waste oil heaters, waste oil units which are 500,000 Btu/hr capacity will burn approximately 3.6 gal/hr of waste oil. For the purposes of my calculations, I have chosen to use 5 gal/hr to allow for a margin of safety. I have also obtained data from the waste oil analysis which were submitted to establish ash, lead, and sulfur contents for a typical waste oil sample. Below I have provided my calculations for your review:

$$5\ \frac{gal}{hr} \times 64(\%P)\frac{lbs}{1000\ gal} = 0.32\ \frac{lb}{hr} \times 24\ \frac{hrs}{day} = 7.68\ \frac{lbs}{day} \quad @P = 1\%$$

The waste oil analysis provided the following values for P: 0.27%; 0.36%; 0.77%; 0.9%; 0.92%; 1.0%; and 2.45%. Using the 2.45% my calculations showed emissions of 18.8 lbs/day. However, I felt that the 2.45% was extreme as compared to the other analysis.

LEAD:

$$5\ \frac{gal}{hr} \times 50(\%L)\frac{lbs}{1000\ gal} = 0.25\ \frac{lb}{hr} \times 24\ \frac{hrs}{day} = 6\ \frac{lbs}{day} \quad @L = 1\%$$

The waste oil analysis provided the following values for L: 0.95 ppm; 2.01 ppm; 12.3 ppm; 15 ppm; 27 ppm; 27.2 ppm; 64 ppm; 66.6 ppm; and 98.1 ppm. Converting to percentages - 98.1 ppm becomes 0.0098%. The use of 1% provides a sufficient cushion.

NOx:

$$5\ \frac{gal}{hr} \times 1.9\ \frac{lbs}{1000\ gal} = 0.0095\ \frac{lb}{hr} \times 24\ \frac{hrs}{day} = 0.23\ \frac{lb}{day}$$

$$5\ \frac{gal}{hr} \times 12.8(\%S)\frac{lbs}{1000\ gal} = 0.26\ \frac{lb}{hr} \times 24\ \frac{hrs}{day} = 6.1\ \frac{lbs}{day} \quad @S = 4\%$$

U.S. EPA indicated that there is the possibility that waste oil could have a sulfur content similar to that of No. 6 fuel oil, and that is

Phenanthrene: $5 \times \frac{9.9\ E\text{-}05\ lb}{1000\ gal} = 5\ E\text{-}07\ \frac{lb}{hr} \times 4.38 = 2\ E\text{-}06$ tpy
anthracene

Dibutylphthalate: $5 \times \frac{3.4\ E\text{-}05\ lb}{1000\ gal} = 1.7\ E\text{-}07\ \frac{lb}{hr} \times 4.38 = 7.4\ E\text{-}07$ tpy

Pyrene: $5 \times \frac{5.1\ E\text{-}05\ lb}{1000\ gal} = 2.6\ E\text{-}07\ \frac{lb}{hr} \times 4.38 = 1.1\ E\text{-}06$ tpy

Based on the above calculations - utilizing AP 42 emission factors - it appears that waste oil heaters which are not greater than 500,000 Btu/hr maximum capacity qualify for the "De Minimus" exemption pursuant to ORC Section 3704.011. Please let me know if you agree with the above determination. I would like to know if I should continue to process applications for these units. It is my understanding that if a source qualifies, we are to stop processing permits for units which qualify. Please let me know what I should do. Thank you very much for your cooperation in this matter.

cc: Mike Hopkins - Section Manager, AQM&P

OhioEPA
State of Ohio Environmental Protection Agency

P.O. Box 1049, 1800 WaterMark Dr.
Columbus, Ohio 43266-0149
(614) 644-3020
FAX (614) 644-2329

George V. Voinovich
Governor

MEMORANDUM

TO: Jim Braun, DAPC

FROM: Jeanne M. Mallett, Supervising Attorney

DATE: April 28, 1994

SUBJECT: Memorandum re: New PTI Exemptions

CONFIDENTIAL ATTORNEY-CLIENT PRIVILEGED COMMUNICATION

In response to your inquiry asking me to review your memorandum (attached) as above referenced, there are several issues. First, it seems to me that any memorandum regarding this issue should also address the new insignificant source exemption of 3704.011 and should be developed as a formal policy signed by Bob rather than an informal memorandum to one district even if you copy other districts. It is an important enough issue that the Director's Office (including Bartter, French-Berry, and Tiell) should be fully aware of the proposed policy before it is made public. That does not mean that the policy need be long or complicated nor that it should take months to develop, simply that it be formalized in a different manner and that more consideration be given to the language chosen.

As to the memorandum itself, I am not certain to what Jim refers to as not being legal or what you now intend to put in the memorandum since on my copy the last line of the first paragraph and the last line of the third paragraph are deleted. However, I will try to address what I see as the legal issues with regard to ORC 3745-31-03, the exemptions section that became effective on October 8, 1993.

The language of OAC 3745-31-03(A) merely states that a permit to install "must be obtained for the installation or modification of a new air contaminant source unless exempted from the requirements." There follows a list of permanent exemptions. Buried in that list is section (mm), which exempts from the exemption sources regulated under NESHAPS and/or NSPS. Section OAC 3745-31-03(A) is not retroactive in that it will not undo any actions we have already taken with regard to the issuance of PTI's for the now permanently exempted sources. However, it does act, as of its effective date, to wipe out any requirement that the permanently exempted sources have a PTI. This means that, if a source modified or constructed a new source prior to the effective date of the rule but did not obtain a PTI, the source is no longer required to get one. Thus, if we did not move to get them to apply earlier, I believe we no longer can. They no longer must fulfill

that requirement even though, before October 8, 1993, they would have been required to obtain a PTI. By the way, if a source falls into the categories covered by the permanent exemptions of OAC 3745-31-03(A) it is now also exempt from having to obtain a PTO pursuant to recently amended OAC 3745-35-02(A)(2), effective April 20, 1994. In addition, sources exempt pursuant to the statutory section, ORC 3704.011, are now exempt from our statute and all our rules.

Given this situation, the return of PTI applications pending for such sources as well as the exercise of enforcement discretion if no enforcement action has already been started is appropriate. Enforcement discretion may include a reasonable differentiation between sources. For example, sources that have BAT but did not file an application, would not be subjects of enforcement action. However, sources that are not now completely exempted pursuant to the statute and that do not have BAT and did not file an application might be considered for enforcement. That decision is a policy matter based on considerations of environmental harm and our resources. You may or may not want to mention enforcement discretion specifically in the policy, but I think it would be helpful to do so. This has been a matter of concern to the Director's Office although I believe it is appropriate to deal specifically with the issue.

I have tried to deal with the implied questions in your memorandum. If you have further questions, please do not hesitate to contact me.

Attachment

cc: Judith French-Berry, Deputy Director
Jennifer Tiell, Deputy Director
Bob Hodanbosi, Chief, DAPC
Mike Hopkins, DAPC
Jim Orlemann, DAPC

ROUTE SLIP Date 4/11/94

TO: JEANNE MALLETT - LEGAL
JIM BRAUN - DAPC

SUBJECT: PTI EXEMPTIONS

PURPOSE	Circulate To	Initial	Date
Action			
☒ Approval			
As Requested			
Comment			
Information			
File			
For Follow up on			
Reply ☐ Direct ☐ From me			
Return to			
See me			
Signature			
Other — See Remarks			

REMARKS: PLEASE PROVIDE LEGAL GUIDANCE IN THIS MATTER. THANK YOU.

EPA 008 (12/81) OVER ☐

e communication

date: 4/11/94

CO

v PTI exemptions

AFT

dated December 27, 1993 regarding the
ere installed prior to the effective
per 8, 1993) and had not been properly
ion is that "technically" a PTI would
tions are intended for insignificant
ot adversely affect air quality.
r request PTI applications for sources
r PTI rules. ~~Furthermore, we will not~~
~~se sources.~~

erating Permit program, and our
and PTO's) in a more efficient manner,
dered by processing PTI's for sources
nificant. With limited personnel, we
on those projects which will
r air quality.

Please note, that if an application has been received for a PTI prior to October 8, 1993 for a source which had not been constructed before this time, then the application can be returned to the company with a short note informing them of the new exemptions. ~~noting that the Permit to Operate requirement is still in effect.~~

If you have any additional questions regarding this issue, please contact me at (614)644-3617. Thank you.

JB/MH

cc: Air Lines
Bob Hodanbosi, DAPC
Jim Orlemann, DAPC
Misty Parsons, DAPC
Tom Rigo, DAPC
Alan Lloyd, DAPC
LAA/DO Air Supervisors

Jim B.

This should be cleared w/ the Legal Section. It does not appear to me.

BOB / ~~Tom~~

MIKE H WANTED TO GET YOUR APPROVAL

PLEASE REVIEW

THANKS

JB

OEPA inter-office communication

to: Craig Osborne - SWDO date: 4/11/94

from: Jim Braun through Mike Hopkins - CO

subject: "Grandfather" under the new PTI exemptions

DRAFT

This memo is in response to your IOC dated December 27, 1993 regarding the requirements for new sources which were installed prior to the effective date of the new PTI exemptions (October 8, 1993) and had not been properly permitted. The answer to your question is that "technically" a PTI would be required. However, the PTI exemptions are intended for insignificant air contaminant sources which will not adversely affect air quality. Consequently, we should not pursue or request PTI applications for sources which are currently exempted from our PTI rules. ~~Furthermore, we will not pursue an enforcement action for these sources.~~

With the inclusion of the Title V Operating Permit program, and our commitment to process permits (PTI's and PTO's) in a more efficient manner, our workload does not need to be hindered by processing PTI's for sources which we have determined to be insignificant. With limited personnel, we need to focus our time and resources on those projects which will substantially improve and protect our air quality.

Please note, that if an application has been received for a PTI prior to October 8, 1993 for a source which had not been constructed before this time, then the application can be returned to the company with a short note informing them of the new exemptions. ~~noting that the Permit to Operate requirement is still in effect.~~

If you have any additional questions regarding this issue, please contact me at (614)644-3617. Thank you.

JB/MH

cc: Air Lines
Bob Hodanbosi, DAPC
Jim Orlemann, DAPC
Misty Parsons, DAPC Tom Rigo, DAPC
Alan Lloyd, DAPC
LAA/DO Air Supervisors

Jim B. This should be cleared w/ the Legal Section. It does not appear to me.

BOB ~~Fm D~~

MIKE H. WANTED TO GET YOUR APPROVAL PLEASE REVIEW THANKS JB

OhioEPA
State of Ohio Environmental Protection Agency

ADDRESS:
1800 WaterMark Drive
Columbus, OH 43215-1099

TELE: (614) 644-3020 FAX: (614) 644-2329

MAILING ADDRESS:
P.O. Box 1049
Columbus, OH 43216-1049

INTER OFFICE COMMUNICATION

DATE: April 17, 1996

TO: District Offices and Local Air Agencies

FROM: Mike Hopkins - Manager, Air Quality Modeling and Planning Section

SUBJECT: Discretionary exemptions requests

As you know, under Ohio Administrative Code (OAC) 3745-31-03(A)(2) there are several sections that allow the Director to exempt the installation of an air contaminant source from the requirements to apply for and obtain a permit to install. In the past, field offices have interpreted (as well as central office personnel) that as the Director's representative this allows them to issue approval letters having all the legal status as if the Director had actually signed the letter per (OAC) 3745-31-03(A)(2).

Recently, our legal department has informed us that these discretionary exemptions requests under (OAC) 3745-31-03(A)(2) should be formally signed by the Director.

Therefore, I am requesting that any further discretionary exemptions requests per (OAC) 3745-31-03(A)(2) should be formally signed by the Director and to implement the following procedure.

The field offices will review the discretionary exemptions requests and generate a draft approval letter to be signed by the Director and submit the draft letter and the request along with the supporting documentation for the request to Central Office in order to secure the Director's signature. This draft should be sent to your New Source Contact. They will coordinate the securing of the Director's signature.

If you have any questions on this procedure, please call Misty, Safaa, Alan or myself.

MH/all

cc: Bob Hodanbosi, DAPC

C:\save\district\dis.4me

To: Bob Hodanbosi, Chief, DAPC
From: Jeanne M. Mallett, Supervising Attorney
Subj.: Rules requiring Director's Actions
Date: January25, 1996

CONFIDENTIAL: ATTORNEY-CLIENT PRIVILEGED COMMUNICATION

It has come to my attention that, with regard to the OAC 3745-31-03 Discretionary Exemptions, DAPC personnel are signing letters purporting to give the exemption. All sections of the rule clearly put that decision in the director's hands; therefore any written exemption needs to be signed by the director. We can, of course, and probably should expand the director's delegation to us to utilize his signature stamp on these if they are numerous, but it needs to be a director's action and as such needs to be public noticed.

Some of the confusion may lie in the different wording of some of the exemptions. Exemptions (a), (b) and (c) do not specify that the director's discretionary action must be in writing. I interpret that as allowing the director to give the "go-ahead" verbally because of the emergency nature of the action; but it still must be followed up with a written action that can be journalized and public noticed. The reason for that is both the requirement that we have in our general procedural rules to notice actions of the director and the practical reason that there should be a record of the director's taking any action that exempts one from other rules.

Finally, in a general reminder, any time a rule specifies that the director must take an action for the section to apply, whether it is a required action or a discretionary one, the action must be treated as an action of the director and journalized and public noticed. Where a rule does not so specify, e.g., the Permanent Exemptions in OAC3745-31-03, then a DAPC staffer may write a letter stating that on the basis of the information submitted, the source falls within the exemption of the rule. In that case nothing is being granted; there is merely an interpretation of the rule applied to a source.

If any one has any questions on this matter or needs my assistance in structuring documents related to it I would be happy to help.

c: Mike Hopkins

DRAFT FOR COMMENT May 7, 1999

Instructions on processing **Directors Discretionary Exemptions**

Background:
Directors discretionary exemptions allow the Director to delay the requirement to obtain a permit to install prior to installation by up to six months after installation of an air contaminant source or to exempt an air contaminant source from permit to install requirements due to the nature or duration of the activity. The Director is given this discretion in Ohio Administrative Code (OAC) rule 3745-31-03.

Process review of discretionary exemption requests:
Requests for Directors discretionary exemptions are usually sent to the Directors office where they are routed to the appropriate District Office or local air agency (DO/laa) for review and consideration. The DO/laa personnel review the request and make a determination in accordance with the criteria identified in OAC rule 3745-31-03. The DO/laa personnel then submit a recommendation to the DAPC Central Office (CO) Air Quality Modeling and Planning (AQM&P) section. AQM&P staff review the recommendation and develop a letter for signature by the Director identifying approval or denial of the discretionary exemption request. Upon completion, the letter is sent to the Directors office for signature after being signed-off by the DAPC Section Manager, DAPC Chief, and OEPA Legal. The letter is signed and dated by the Director and returned to DAPC for mailing, copying and journalization.

AQM&P review staff directions:
The sign-off sheet, public notice request, letter, and PTI log for the Directors discretionary exemption is available as a template under the AQMPS option when you choose *New* in WordPerfect. Although the requests are 'request specific', the Directors office requires the letter to be consistent from a formatting perspective. Thus, please do not change the settings of the template. Please use the template to develop all future discretionary letters.

Important items to note on the template:

1. Fill in all prompted items
2. Enter the reason/basis for the exemption on the second notification page. Please note to finish this section off with a period. Also, note that each line is limited to 60 characters. Delete the text '**ENTER THE REASON/BASIS FOR THE EXEMPTION HERE**' for any line that does not contain text.
3. Go to the letter page and type the body of the letter.
4. Save the file (into the *j:\aqmps\pti\dirdisc* subdirectory)
5. Print the entire document.
6. Place the entire document in Mike Hopkins in basket for review and sign-off.

The request and all associated paperwork will make its way through the signatory chain. The Director will sign and date the letter and send it to the AQM&P Section secretary for copying, journalization, and mailing.

AQM&P Section secretary directions:

1 Upon receipt o the signed letter, make one copy for each cc (identified on the letter) and each BC (identified on the sign-off sheet).
2. Hand-write or type the date the Director signed the letter onto the DATE OF ACTION field (Line 10A) on the 'Notifications and Central Register Form'
3. Hand-write or type the date you complete the form onto the DATE COMPLETED section on the 'Notifications and Central Register Form'.
4. Check page 2 of the 'Notifications and Central Register Form' to ensure the template language **'ENTER THE REASON/BASIS FOR THE EXEMPTION HERE'** does not appear on the form and that the reason is completed with a period.
5. Enter the date the director signed the letter onto the 'PTI DIRECTORS DISCRETIONARY EXEMPTION LOG' as the 'Date of Action'

NOTE: if any corrections need to be made to the public notice request, the file can be accessed by checking the file reference on the bottom of the PTI log.

6. Mail the original of the letter to the person identified in the letter via certified mail.
7. Highlight each cc and mail via regular or inter-office mail to each cc at the address identified on the PTI log
8. Provide the BC copies to all persons identified on the BC list
9. Open the j:\aqmps\pti\dirdisc\dirlog.wpd file
10. Add the requestor (facility) name and date of the signed Directors letter.
11. Save and close the file.
12. Inter-office the 'Notifications and Central Register Form' to 'Grace Clapper, Office of Data and Systems' for processing.
13. Staple the file copy (on top) to the sign-off sheet and all other associated documents (e.g., the original request letter, internal correspondence, etc) and place in the AQM&P Directors Discretionary Exemption file in date order.

State of Ohio Environmental Protection Agency

STREET ADDRESS: MAILING ADDRESS:

1800 WaterMark Drive
Columbus, OH 43215-1099

TELE: (614) 644-3020 FAX: (614) 644-2329

INTER OFFICE COMMUNICATION

DATE: November 20, 1994

TO: District Offices and Local Air Agencies

FROM: Mike Hopkins - Manager, Air Quality Modeling and Planning Section

SUBJECT: Revised Procedure for start construction exemption requests

This guidance replaces the guidance issued September 16, 1994.

When the Ohio Revised Code (ORC) was amended to incorporate language from House Bill 153, there were numerous and substantive changes made to section 3704. One change allowed the Director to have the discretion to allow the construction of an air contaminant source before obtaining a permit to install. This is allowed only if the applicant demonstrates that the source will be installed in compliance with all applicable emission limits, will not adversely affect public health or safety or the environment, and if the Director determines that such an action will avoid an unreasonable hardship on the owner or operator of the source. Any such determination shall be consistent with the federal Clean Air Act.

This start construction exemption **cannot be used for synthetic minors, major stationary sources or major modifications either under the Prevention of Significant Deterioration rules or under the federal New Source Review Nonattainment rules.** This is because it would be a violation of current federal rules to start construction of a major stationary source or major modification without first obtaining a <u>federally</u> <u>enforceable</u> permit.

For those requests that can be approved we need to decide if the above criteria have been met. This determination can be made if the following steps have been accomplished:

1 the applicant must have submitted a complete application;

2 we must have reviewed the application and recommended approval;

3) we must have or will, at the same time that we are approving their request, issue a draft permit of the proposed air contaminant source(s) to be installed.

In addition, the applicant will need to submit the following information to either Misty Parsons, or Alan Lloyd of my staff, depending on which one of them is reviewing the worksheet for the proposed installation, or, myself, if we have not issued a draft permit for the proposed installation:

1) a statement that the proposed installation of the source(s) will comply with all applicable emission limits;

2) a statement that the proposed installation of the source(s will not adversely affect public health or safety or the environment;

3 a description of the unreasonable hardship to the owner or operator if the source cannot be installed before the issuance of a final permit. This description would include general estimates of the additional costs associated with waiting for the final permit (detailed cost data is not required) and a description of any other costs or hardships (loss of work, jobs, etc.);

4) a statement that they will comply with and be consistent with the Clean Air Act.

Once we receive the request, we will review it and prepare a Director's approval or denial letter.

To expedite these requests, the field offices are welcome to prepare the Director's letter. An example of one is attached

You will need to advise the applicant that the issuance of this exemption letter from temporarily obtaining a final permit to install does not waive the requirement to obtain a final permit and does not grant them any assurance that a final permit to install will be issued.

In addition, you will need to advise the applicant that the possibility exists that they may not receive a final permit to install and the installation and operation of the proposed source before obtaining a final permit are entirely at their own risk. This **permission does not authorize the operation of the source** and we reserve the right to revoke this permission at any time.

If you have any questions on this procedure, please call Misty Alan or myself.

MH/all
policy\construct.wpd

Attachment

cc: Bob Hodanbosi, DAPC
Alan Franks, Dir. Office
Vaughn Laughlin, Dir. Office
Jenny Tiell, Dir. Office
Jeanne Mallett, Legal
Misty Parsons, DAPC
Alan Lloyd, DAPC
Clara Dailey, DAPC
Sara Geary, DAPC

Sample Letter

Name and address of facility seeking exemption

Dear (**person letter directed to**):

This letter is in response to your (**date**) request to install (**description of equipment to be installed**) before obtaining a final air pollution permit to install. You requested this allowance under Amended Senate Bill 153 which revised Ohio Revised (ORC) Section 3704.03(W).

It is my understanding that on (**date facility submitted permit application**)(**name of facility**) submitted an air pollution permit to install application to the (**name of field office**) for (**description of equipment to be installed**).(**??-????**). (**name of field office**) reviewed the applications and recommended the issuance of a draft permit. It is anticipated that the 30-day public comment period on the draft permits will expire sometime after (**date**). The Ohio EPA cannot issue a final permit to install until the public comment period expires and all comments are reviewed (assuming it can be approved).

Under ORC section 3704.03(W), the Director has the authority to allow the installation of an air pollution source prior to the issuance of a final permit to install if certain conditions are met. First, the applicant must "...demonstrate that the source will be installed to comply with all applicable emissions limits and will not adversely affect public health or safety or the environment...". In order to meet this requirement, (**name of facility**) must comply with all terms and conditions contained in the draft permit. In addition, (**name of facility**) must comply with all applicable air pollution rules and policies.

[Revise this next paragraph as appropriate.

Second, the Director must determine that allowing the installation will avoid an unreasonable hardship on the owner or operator of the source(s). (**name of facility**) has submitted data indicating that without installation of these source(s), (**name of facility**) will have to shut down during scheduled production in order to install these source which would result not only in layoffs at their facility, but also layoffs at other (**name of facility**) which depend on (**name of facility**) products produced for them.

Finally, this determination must be consistent with the federal Clean Air Act. I believe that you meet this requirement by complying with the draft permit to install terms and conditions

by complying with all applicable air pollution rules and policies, and by our review of the calculations and procedures employed in the draft permit.

Based on our review of the data submitted by you, I believe it is appropriate to allow you to install the (**description of equipment to be installed**) prior to obtaining a final permit. This permission is granted only if you comply with the terms and conditions contained in the draft permit and with all applicable air pollution rules and policies. This permission does not waive the requirement to obtain a final permit to install before commencement of operation of the source and does not grant you any assurance that the final permit to install will be issued (U.S. EPA could ask us to deny the issuance of the permit). This letter does not authorize operation of the source(s) and we reserve the right to revoke this permission. The possibility that you will not receive final a permit to install is entirely at your own risk.

If you have any questions, please contact (**name of permit reviewer at Central Office of Ohio EPA**) of the Division of Air Pollution Control at (614) 644-2270.

Sincerely

Donald R. Schregardus
Director

DS/all

cc: **field office personnel**

State of Ohio Environmental Protection Agency

P.O. Box 1049, 1800 WaterMark Dr.
Columbus, Ohio 43266-0149
(614) 644-3020
FAX (614) 644-2329

George V. Voinovich
Governor

INTER OFFICE COMMUNICATION

DATE: September 16, 1994

TO: District Offices and Local Air Agencies

FROM: Mike Hopkins - Manager, Air Quality Modeling and Planning Section

SUBJECT: Procedure for start construction exemption requests

When the Ohio Revised Code (ORC) was amended to incorporate language from House Bill 153, there were numerous and substantive changes made to section 3704. One of the changes allowed for the Director to have the discretion to allow the construction of an air contaminant source prior to obtaining a permit to install. This is allowed only if the applicant demonstrates that the source will be installed in compliance with all applicable emission limits, will not adversely affect public health or safety or the environment, and if the Director determines that such an action will avoid an unreasonable hardship on the owner or operator of the source. Any such determination shall be consistent with the federal Clean Air Act.

In order for us to determine if the above criteria has been met, the following steps must have been accomplished:

1 the applicant must have submitted a complete application;

2) we must have reviewed the application and recommended approval;

3) we must have or will, at the same time that we are approving their request, issue a draft permit of the proposed air contaminant source(s) to be installed.

In addition, the applicant will need to submit the following information to either Misty Parsons, Jim Braun or Alan Lloyd of my staff, depending on which one of them is reviewing the worksheet for the proposed installation, or, myself, if we have not issued a draft permit for the proposed installation:

1 a statement that the proposed installation of the source(s) will comply with all applicable emission limits;

2) a statement that the proposed installation of the source(s) will not adversely affect public health or safety or the environment;

3 a description of the unreasonable hardship to the owner or operator if the proposed installation of the source can not be installed before the issuance of a final permit. This description would include general estimates of the additional costs associated with waiting for the final permit (no detailed cost data is required) and a description of any other costs or hardships (loss of work, jobs, etc.);

4) a statement that they will comply with and be consistent with the Clean Air Act.

Once we receive the request, we will review it and prepare a Director's approval or denial letter.

In order to expedite these requests, the field offices are welcome to prepare the Director's letter. An example of one is attached.

You will need to advise the applicant that the issuance of this exemption letter from temporarily obtaining a final permit to install does not waive the requirement to obtain a final permit and does not grant them any assurance that a final permit to install will be issued, especially in the case where the proposed installation of the source is subject to federal new source review (**USEPA may have some concerns about the issuance of a final permit**).

In addition, you will need to advise the applicant that the possibility exists that they may not receive a final permit to install and the installation and operation of the proposed source prior to obtaining a final permit is entirely at their own risk. This **permission does not authorize the operation of the source** and we reserve the right to revoke this permission at any time.

If you have any questions on this procedure, please call Misty Jim, Alan or myself.

MH/all

cc: Bob Hodanbosi
Jim Orlemann
Misty Parsons
Alan Lloyd
Jim Braun
Tom Rigo

Attachment

OhioEPA
State of Ohio Environmental Protection Agency

P.O. Box 1049, 1800 WaterMark Dr.
Columbus, Ohio 43266-0149
(614) 644-3020
FAX (614) 644-2329

George V. Voinovich
Governor

Name and address of facility seeking exemption

Dear (person letter directed to):

This letter is in response to your (**date**) request to install (**description of equipment to be installed**) prior to obtaining final air pollution permits to install. You requested this allowance under Amended Senate Bill 153 which revised Ohio Revised (ORC) Section 3704.03(W).

It is my understanding that (**name of facility**) submitted air pollution permit applications for (**description of equipment to be installed**) to the (**name of field office**) on (**date facility submitted permit application**) for permit to install no. (**??-????**). (**name of field office**) reviewed the applications and submitted recommendations to issue draft permits to the Ohio EPA. The draft permits were issued (as opposed to final permits) because the proposed sources are considered a major modification at a major facility under federal law. It is anticipated that the 30-day public comment period on the draft permits will expire sometime after (**date**). The Ohio EPA cannot issue final permits to install until the public comment period expires and all comments are reviewed (assuming it can be approved).

for a netting permit, the following is an example of the type of language that maybe employed:

In order to avoid federal new source review requirements, the draft permits were issued so that federal review of the shut down of other sources at the facility that would be used as credit against the emissions generated by the proposed installation of the (**description of equipment to be installed**) could be accomplished. The purpose of the shut down of other sources at the facility was to use the actual emissions over the last two years of these sources as credit against the potential emissions of the proposed installation of the (**description of equipment to be installed**) and along with the contemporaneous increases and decreases in facility-wide emissions over the last five years such that the result would be below new source review threshold limits, thereby avoiding federal new source review requirements.

for a synthetic minor permit the following is an example of the type of language maybe employed:

In order to avoid federal new source review requirements, the draft permits were issued with restrictions on the use of coatings. The purpose of these restrictions was to synthetically restrict the potential emissions to below new source review threshold limits, thereby avoiding federal new source review permitting requirements. Currently, the issuance of final permits to install is the only mechanism we have to create federally enforceable restrictions.

Under ORC section 3704.03(W), the director has the authority to allow the installation of an air pollution source(s) prior to the issuance of a final permit(s) to install if certain conditions are met. First, the applicant must "...demonstrate that the source will be installed to comply with all applicable emissions limits and will not adversely affect public health or safety or the environment...". In order to meet this requirement, (**name of facility**) must comply with all terms and conditions contained in the draft permits. In addition, (**name of facility**) must comply with all applicable air pollution rules and policies.

Second, the director must determine that allowing the installation will avoid an unreasonable hardship on the owner or operator of the source(s). (**name of facility**) has submitted data indicating that without installation of these source(s) during the plant shut down, (**name of facility**) will have to shut down during scheduled production in order to install these source which would result not only in layoffs at their facility, but also layoffs at other (**name of facility**) which depend on (**name of facility**) products produced for them.

Finally, this determination must be consistent with the federal Clean Air Act. We believe that you meet this requirement by complying with the draft permits to install terms and conditions, by complying with all applicable air pollution rules and policies, and by our review of the calculations and procedures employed in the draft permit.

Based on our review of the data submitted by you and our review of the netting review performed for the draft permits, I believe it is appropriate to allow you to install the (**description of equipment to be installed**) prior to obtaining final permits. This permission is granted only if you comply with the terms and conditions contained in the draft permit and with all applicable air pollution rules and policies. This permission does not waive the requirement to obtain a final permit to install before commencement of operation of the source(s) and does not grant you any assurance that the final permit to install will be insured (U.S. EPA after their review could ask us to deny the issuance of these permits). This letter does not authorize operation of the source(s) and we reserve the right to revoke this permission. The possibility that you will not receive final permits to

install is entirely at your own risk

If you have any questions, please contact (**name of permit reviewer at Central Office of Ohio EPA**) of the Division of Air Pollution Control at (614) 644-2270.

Sincerely,

Donald R. Schregardus
Director

DS/all

cc: **field office personnel**

OhioEPA
State of Ohio Environmental Protection Agency

P.O. Box 1049, 1800 WaterMark Dr
Columbus, Ohio 43266-0149
(614) 644-3020
FAX (614) 644-2329

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MAR 15 1993
BOB

George V. Voinovich
Governor
Donald R. Schregardus
Director

DCR GWIDEBOOK

MEMORANDUM

TO: Mike Hopkins, DAPC/CDO

FROM: Jeanne M. Mallett, Supervising Attorney

SUBJECT: Conditional Permits to Operate

DATE: March 12, 1993

ATTORNEY-CLIENT PRIVILEGED COMMUNICATION

I am sorry to be so long in responding to questions relating to the above issue in your December 7, 1992, memorandum. In the fact scenario you describe the source would be legally allowed to operate only for the purpose of testing, not production except as it is necessary to the testing. OAC 3745-35-02(H) states:

> "If a new source that has been constructed, installed, located or modified in accordance with the provisions of a permit to install, and otherwise in accordance with applicable air pollution control law, is unable to comply with the requirements of paragraph (C)(4)(b) [performance testing] as of the date of start-up of operations, the director may grant a conditional permit to operate such source for a period not to exceed six months from start-up of operations provided the period is used to remedy any defect which prevents such compliance and the applicant demonstrates that compliance with emission standards prescribed by applicable air pollution control law will be achieved as expeditiously as practicable, any reasonably available alternative operating procedures and interim control measures have been used or will be used to reduce excess emissions, and the continued operation of the source pursuant to the conditional permit to operate will not endanger or threaten to endanger human health. Conditional permits to operate may not be renewed, and shall contain such terms and conditions as the Ohio environmental protection agency determines necessary and appropriate." [Emphasis added]

OhioEPA
State of Ohio Environmental Protection Agency
P.O. Box 1049, 361 E. Broad Street
Columbus, Ohio 43266-1049
(614) 466-8565

Richard F. Celeste
Governor

Mike

RECEIVED
FEB 10 1987
Ohio Environmental Protection Agency
CENTRAL DISTRICT OFFICE

M E M O R A N D U M

DATE	February 6, 1987
TO	Engineering Committee
FROM	Engineering Steering Committee Bob H.
RE	Enforcement Recommendations for New Source Violations

There are numerous sources being installed throughout the State without benefit of the Permit to Install (PTI) process. Not only is this a violation of the Ohio Administrative Code (OAC), but "after the fact" PTI's can influence best available technology (BAT) determinations. It has been suggested that the New Source Review (NSR) Subcommittee outline a minimum enforcement strategy for these administrative violations to be distributed to the field offices to provide for more uniform application of the PTI rules and subsequent enforcement.

First, we believe enforcement action for violations of only permitting requirements should be left to the discretion of field office and be determined on a case-by-case basis. A major automobile manufacturing facility installing a new source without the required permit should receive a stronger enforcement effort than some "mom and pop" shop because the larger companies are (or should be) more familiar with the rules. However, some "mom and pop" shops should be made aware of the error of their ways. To this end, we offer the following solution:

A letter similar to Attachment I should be sent to all permitted facilities. This lays the groundwork for future enforcement, i.e., the facility received a written notice explaining the rules. If, after the letter is received, a source is installed without a PTI, enforcement action could be initiated immediately.

If a field office does not have the time or resources to issue this general notification, we recommend at a minimum that a letter similar to Attachment II be sent to any owner of a source that has been constructed without a PTI. This serves as a notice of violation to the facility. Additionally, if a company not only installed equipment without a PTI, but is also operating the source, the letter should include reference to violations of OAC 3745-35-02.

Copies of any warning letters should be sent to the Ohio EPA District Chief and to the Enforcement Committee contact. The District Chiefs can coordinate with the Water Pollution Control and Solid & Hazardous Waste Divisions. In addition, the field office may want to copy the entity's corporate office.

We recommend stronger action against second offenders. If the above notice has been sent, and a facility does not take it seriously, an enforcement action request (EAR) should be drafted and sent to the Enforcement Committee upon discovery of the second violation. In most cases, a Director's warning letter (Attachment III) should be used for the second offenders. If, after a Director's warning letter another violation occurs, another EAR should be prepared and Findings and Orders with penalties or a referral to the Attorney General's office should be used to resolve the violation.

In all cases, any violations of State Implementation Plan (SIP) emission limitations, BAT limits, or control requirements should be referred to the Enforcement Committee, by means of an EAR, for legal action.

This outlines what we feel should be the minimum action taken with facilities installing sources without the proper permit. Although this process may appear lenient, currently approximately one-half of the PTI's are issued to sources that have already been constructed. We tried to develop a system that would allow for uniform enforcement throughout the State, yet would not overload the enforcement process. We believe that the suggested approach strikes this necessary balance. Stronger actions can be initiated at the discretion of the field office if the situation warrants.

This material has also been reviewed by the Ohio EPA Enforcement Committee. Please implement these recommendations as soon as possible.

BH/jlc

Attachments

Distribution

Lynn Malcolm, Akron
Ray Silbernagel, SWOAPCA
Curt Marshall, RAPCA
Harold Strohmeyer, NOVAA
Bob Miles, CDO
Gerry Rich, NWDO
Jim Sumner, SWDO
Bruce Blankenship, Canton
Doug Seaman, Cleveland
Don Cavote, Portsmouth
Paul Munn, Toledo
Dennis Bush, NEDO
Fred Klingelhafer, SEDO
Jim Orlemann, DAPC

<date>

<company/address>

The purpose of this letter is to discuss the requirements involved in obtaining an Ohio Environmental Protection Agency (EPA) permit to install (PTI) for a new air contaminant source. If you have obtained a PTI in the past, you may be somewhat familiar with this process. However, there are a few points which, if emphasized, should improve the application process.

The first important point is that, according to Ohio Administrative Code (OAC) Rule 3745-31-02(A), ". . .(n)o person shall cause, permit or allow the installation of a new source of air pollutants . . . without first obtaining a permit to install from the director." Thus, permit applications should be completed and submitted to this Agency with sufficient lead time to enable our review to be completed and a permit issued (by the Ohio EPA) before the source is installed. In this way, you can be assured that the installation is approved prior to the commitment of company expenditures. Failure to obtain the PTI before installation risks nonapprovability of the permit and subjects the company to possible enforcement action by the Ohio EPA and/or U.S. EPA.

The second point is to make sure all questions on the PTI application are completed. Our ability to review permit applications is directly related to the thoroughness of the information presented. It is essential that the company provide the name and quantity of all materials and chemicals which are either inputs or products of the new source. Given this data, and the other information requested on the application form, we are able to calculate expected emissions and determine their acceptability with respect to allowable limits under state rules.

The third point is one which, when neglected, can cause a considerable delay in review time. This point concerns the requirement of OAC Rule 3745-31-05(A)(3) which states that each new source must employ best

available technology (BAT). BAT is a case-by-case determination of an emission limit and/or control technique which, taking into account environmental, energy and economic considerations, represents the maximum emission control achievable by the source. When the company submits its application, the demonstration of BAT must be included. The applicant must show a thorough investigation of control techniques has been pursued, with the final emission level determined as representative of BAT. The documented BAT determination is the focal point of this Agency's review.

Enclosed are several items which should aid you in the PTI process. Please find one PTI application form (with a listing of possible appendices), along with a copy of OAC Rule 3745-31-05 which lists the "Criteria for decision by the director." If at some time in the future your company plans to install any new source, please contact this Agency to obtain the appropriate appendix and to discuss the planned installation. Given proper advance notice and completeness of the permit application, this Agency will endeavor to process the permit application in an expeditious manner.

If you have any questions, please do not hesitate to contact <contact person> at <telephone number>.

Sincerely,
LAA Director/DO Unit Supervisor

ATTACHMENT II

1st OFFENDERS

Modify to say accept PTI but first warning.

The <LAA/DO> has learned that <company> began the installation/modification of <source description> prior to applying for and obtaining a Permit to Install (PTI) from the Ohio Environmental Protection Agency (EPA). This constitutes a violation of Ohio air pollution laws and rules, specifically Ohio Administrative Code (OAC) Rule 3745-31-02 (copy enclosed).

The following list identifies the new sources at the facility that constructed without a PTI:

PTI No.	Date	Source	Installation Status

This letter serves as a notification of the requirements of the PTI process in accordance with OAC Section 3745-31. Should future violations of this rule occur, this Agency will recommend that the Ohio EPA institute enforcement action be taken against <company> for violations of the PTI rules.

If at this time, <company> has not applied for a PTI for <source description above>, or some time in the future the company plans to install/modify a source of air contaminants, please contact <LAA/DO> at <telephone no.> to obtain the appropriate forms and discuss the planned installation. This Agency will endeavor to process all applications in an expeditious manner.

If you have any questions, please do not hesitate to contact <contact person> at <telephone no.>.

Sincerely,
LAA Director/DO Unit Supervisor

ATTACHMENT III

2nd OFFENDERS

The Ohio Environmental Protection Agency (EPA) has been notified that <company> began the installation/modification of a new source prior to applying for and obtaining a Permit to Install (PTI) from the Ohio EPA. This constitutes a violation of the Ohio Administrative Code (OAC) Rule 3745-31-02(A).

Specifically, <company> commenced construction on a <source description> at the <facility name and address>. The company has been previously warned of the PTI requirements by <LAA/DO> on <date>. Any future violations of OAC Rule 3745-31-02 will result in further enforcement action, including the possible imposition of monetary penalties, referral to the Attorney General for prosecution, or both.

Please contact <LAA/DO> at <telephone no.> to obtain the appropriate forms and discussion of the installed/modified <source description>. The Ohio EPA will process the PTI application in a prompt manner upon receipt of your completed application.

Warren W. Tyler, Director

ATTACHMENT 4

OhioEPA
State of Ohio Environmental Protection Agency

Box 1049, 361 E. Broad Street
Columbus, Ohio 43266-1049
(614) 466-8565

Richard F. Celeste
Governor

MEMORANDUM

January 9, 1987

TO Engineering Steering Committee

New Source Review (NSR) Subcommittee

RE Enforcement Recommendations for New Source Violations

There are numerous sources being installed throughout the State without benefit of the Permit to Install (PTI) process. Not only is this a violation of the Ohio Administrative Code (OAC), but "after the fact" PTI's can influence best available technology (BAT) determinations. It has been suggested that the NSR Subcommittee outline a minimum enforcement strategy for these administrative violations to be distributed to the field offices to provide for more uniform application of the PTI rules and subsequent enforcement.

First, we believe enforcement action for violations of only permitting requirements should be left to the discretion of field office and be determined on a case-by-case basis. A major automobile manufacturing facility installing a new source without the required permit should receive a stronger enforcement effort than some "mom and pop" shop because the larger companies are (or should be) more familiar with the rules. However, some "mom and pop" shops should be made aware of the error of their ways. To this end, we offer the following solution:

A letter similar to Attachment I should be sent to all permitted facilities. This lays the groundwork for future enforcement, i.e., the facility received a written notice explaining the rules. If, after the letter is received, a source is installed without a PTI, enforcement action could be initiated immediately.

If a field office does not have the time or resources to issue this general notification, we recommend at a minimum that a letter similar to Attachment II be sent to any owner of a source that has been constructed without a PTI. This serves as a notice of violation to the facility. Additionally, if a company not only installed equipment without a PTI, but is also operating the source, the letter should include reference to violations of OAC 3745-35-02.

Copies of any warning letters should be sent to the Ohio EPA District Chief and to the Enforcement Committee contact. The District Chiefs can coordinate with the Water Pollution Control and Solid & Hazardous Waste Divisions. In addition, the field office may want to copy the entity's corporate office.

le recommend stronger action against second offenders. If the above notice has been ;ent, and a facility does not take it seriously, an enforcement action request (EAR) ;hould be drafted and sent to the Enforcement Committee upon discovery of the second 'iolation. In most cases, a Director's warning letter (Attachment III) should be used 'or the second offenders. If, after a Director's warning letter another violation)ccurs, another EAR should be prepared and Findings and Orders with penalties or a 'eferral to the Attorney General's office should be used to resolve the violation.

:n all cases, any violations of State Implementation Plan (SIP) emission limitations, BAT limits, or control requirements should be referred to the Enforcement Committee, by means)f an EAR, for legal action.

'his outlines what we feel should be the minimum action taken with facilities installing ;ources without the proper permit. Although this process may appear lenient, currently ;pproximately one-half of the PTI's are issued to sources that have already been :onstructed. We tried to develop a system that would allow for uniform enforcement :hroughout the State, yet would not overload the enforcement process. We believe that :he suggested approach strikes this necessary balance. Stronger actions can be initiated ;t the discretion of the field office if the situation warrants.

Ve are requesting that the Engineering Steering Committee review this procedure and, f acceptable, distribute it to the field offices for implementation.

3H/jlc

;chments

Distribution

Jim Orlemann, DAPC
Lynn Malcolm, Akron
Paul Munn, Toledo

:c: Tom Tucker, SWOAPCA
Vicki Sarver, RAPCA
Fred Klingelhafer, SEDO
Jim Sumner, SWDO
Kathleen Shannon, DAPC

REGIONAL AIR POLLUTION CONTROL AGENCY
Serving Clark, Darke, Greene, Miami, Montgomery & Preble Counties
451 W. Third Street, P.O. Box 972, Dayton, Ohio 45422, (513) 225-4435

April 27, 984

Mr. Paul Fraley
Specialty Papers Company
P.O. Box 1031
Dayton, OH 45401

Dear Mr. Fraley:

The purpose of this letter is to discuss the requirements involved in obtaining an Ohio EPA permit to install (PTI) for a new air contaminant source. If you have obtained a PTI in the past, you may be somewhat familiar with this process. However, there are a few points which, if emphasized, should improve the application process.

The first important point is that according to Rule 5-31-02(A) of the Ohio Administrative Code (OAC), "....(n)o person shall cause, permit, or allow the installation of a new source of air pollutants.....without first obtaining a permit to install from the director." Thus, permit applications should be completed and submitted to this agency with sufficient lead time to enable our review to be completed and a permit issued (by Ohio EPA) before the source is installed. In this way, you can be assured that the installation is approved prior to the commitment of company expenditures. Failure to obtain the PTI before installation risks nonapprovability of the permit and subjects the company to possible enforcement action by Ohio EPA and/or U.S. EPA.

The second point is to make sure all questions on the PTI application are completed. Our ability to review permit applications is directly related to the thoroughness of the information presented. It is essential the company provide the name and quantity of all materials and chemicals which are either inputs or products of the new source. Given this data and the other information requested on the application form, we are able to calculate expected emissions and determine their acceptability with respect to allowable limits under state rules.

The third point is one which, when neglected, can cause a considerable delay in review time. This point concerns the requirement of Rule 3745-31-05(A)(3) of the OAC which states that each new source must employ the best available technology (BAT).

BAT is a case-by-case determination of an emission limit and/or control technique which, taking into account environmental, energy, and economic considerations, represents the maximum emission control achievable by the source. When the company submits its application, the demonstration of BAT must be included. The applicant must show a thorough investigation of control techniques has been pursued, with the final emission level determined as representative of BAT. The documented BAT determination is the focal point of this agency's review.

Enclosed are several items which should aid you in the PTI process. Please find one PTI application form (with a listing of possible appendices), along with a copy of Rule 3745-31-05 which lists the "Criteria for decision by the director." If at some time in the future your company plans to install any new source please contact this agency to obtain the appropriate appendix and to discuss the planned installation. Given proper advance notice and completeness of the permit application, this agency will endeavor to process the permit application in an expeditious manner. Please call Donna Lee of this agency if you have any questions.

Sincerely,

D. C. Marshall

D. Curtis Marshall
Supervisor
Abatement Unit

DCM/vmt

Enclosure

ATTACHMENT III

2nd OFFENDERS

The Ohio Environmental Protection Agency (EPA) has been notified that <company> began the installation/modification of a new source prior to applying for and obtaining a Permit to Install (PTI) from the Ohio EPA. This constitutes a violation of the Ohio Administrative Code (OAC) Rule 3745-31-02(A).

Specifically, <company> commenced construction on a <source description> at the <facility name and address>. The company has been previously warned of the PTI requirements by <LAA/DO> on <date>. Any future violations of OAC Rule 3745-31-02 will result in further enforcement action, including the possible imposition of monetary penalties, referral to the Attorney General for prosecution, or both.

Please contact <LAA/DO> at <telephone no.> to obtain the appropriate forms and discussion of the installed/modified <source description>. The Ohio EPA will process the PTI application in a prompt manner upon receipt of your completed application.

Warren W. Tyler, Director

ATTACHMENT II

1st OFFENDERS

The <LAA/DO> has learned that <company> began the installation/modification of <source description> prior to applying for and obtaining a Permit to Install (PTI) from the Ohio Environmental Protection Agency (EPA). This constitutes a violation of Ohio air pollution laws and rules, specifically Ohio Administrative Code (OAC) Rule 3745-31-02 (copy enclosed).

The following ist identifies the new sources at the facility that constructed without a PTI:

PTI No.	Date	Source	Installation Status

This letter serves as a notification of the requirements of the PTI process in accordance with OAC Section 3745-31. Should future violations of this rule occur, this Agency will recommend that the Ohio EPA institute enforcement action be taken against <company> for violations of the PTI rules.

If at this time, <company> has not applied for a PTI for <source description above>, or some time in the future the company plans to install/modify a source of air contaminants, please contact <LAA/DO> at <telephone no.> to obtain the appropriate forms and discuss the planned installation. This Agency will endeavor to process all applications in an expeditious manner.

If you have any questions, please do not hesitate to contact <contact person> at <telephone no.>.

Sincerely,
LAA Director/DO Unit Supervisor

FACSIMILE REQUEST COVER SHEET

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
AIR AND RADIATION DIVISION
77 WEST JACKSON BOULEVARD
CHICAGO, ILLINOIS 60604

Mike H.

Misty
Alan
Sarah
Kevin

TO:

	IDEM - D. VALINETZ	(317) 233-5968
	IEPA - D. KOLAZ	(217) 524-4718
	MDNR - B. ROSENBAUM	(517) 373-1265
	WDNR - D. PACKARD	(608) 267-0560
	MPCA - M. SANDUSKY	(612) 297-7709
✓	OEPA - J. ORLEMANN/T. RIGO	(614) 644-3681

FROM: GEORGE CZERNIAK

ORGANIZATION: Air Enforcement & Compliance Assurance Branch

PHONE # (312) 886-6789 MACHINE # (312) 353-8289

DATE: 02/15/96 NUMBER OF PAGES INCLUDING THIS COVER SHEET 5

COMMENTS: _____

INFORMATION FOR SENDING FACSIMILE MESSAGES TO AIR ENFORCEMENT AND COMPLIANCE ASSURANCE BRANCH:

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FEB 06 1996
AIR ENFORCEMENT BRANCH,
U.S. EPA, REGION 5

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

FEB 1 1996

ASSISTANT ADMINISTRATOR
FOR ENFORCEMENT AND
COMPLIANCE ASSURANCE

MEMORANDUM

SUBJECT: Liquid Petroleum Pitch As a Fossil Fuel - Applicability Determination for Shell Oil Company, Roxana, Il

FROM: Janet L. Bearden, Acting Director
Air Enforcement Division
Office of Regulatory Enforcement

TO: George Czerniak, Chief (AE-17J)
Air Enforcement and Compliance Assurance Branch
Air and Radiation Division, Region V

Ken Garing, Environmental Engineer
National Enforcement Investigation Center

We reviewed Stephen Rothblatt's and Ken Garing's request, dated June 6, 1995, for written concurrence with your New Source Performance Standards (NSPS) applicability determination. Our analysis of the relevant facts, applicable regulations, and policies leads us to the conclusion that, since the liquid petroleum pitch produced at the Shell Wood River refinery (Wood River) is derived for the purpose of creating useful heat, it meets the definition of fossil fuel provided in 40 C.F.R. Part 60, Subpart D. This site-specific decision for Wood River does not contradict or rescind the April 11, 1975 U.S EPA case-specific applicability determination for the Shell refinery in Deer Park in which we concluded that, at the Deer Park facility, the pitch from the olefin process was a by-product not derived for the purpose of generating useful heat.

Our determination is based on: (1) Shell's response to the December 7, 1994 Section 114 information request issued by Region 5; (2) the Illinois State Implementation Plan; and (3) the Illinois Operating Permit for the Wood River refinery. In its Section 114 response, Shell states that the refinery's vacuum flashing unit produces, among other products, petroleum pitch for refinery fuel combustion. This petroleum pitch must contain less than three percent sulfur by weight to comply with the Illinois SIP, Sec 214.382 (c)(1) and the facility's Operating Permit, issued November 11, 1993. This permit also requires a three percent sulfur limit in the flasher pitch burned in the refinery's heaters and boilers. Shell's response to the U.S.EPA

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Section 114 request for information clearly indicates that to obtain a pitch with the sulfur content of less than three percent, the refinery must apply particular vacuum distillation process conditions, and that this pitch is intentionally derived from petroleum for the purpose of generating useful heat.

Accordingly, we concur with the following determinations:

1. The April 11, 1975 memorandum from Richard Wilson, Director of the Stationary Source Enforcement Division does not establish a nationwide policy determination on petroleum pitch. That memorandum provided a site-specific determination, based on specific information regarding the olefins process at the Deer Park facility which produced pitch as a by-product, that the thermal pitch produced at the Shell Chemical Company Deer Park Texas facility does not meet the definition of fossil fuel provided in 40 C.F.R Part 60, Subpart D.

2. Petroleum pitch produced from petroleum crude to meet some fuel quality specifications and combusted in boilers that are subject to NSPS Subpart D meets the definition of fossil fuel provided at 40 C.F.R §60.41(b).

3. The liquid petroleum pitch produced at the Shell Wood River refinery, Roxana, Illinois, and combusted in Boiler 17 meets the definition of fossil fuel as provided at 40 C.F.R § 60.41(b).

4. A boiler subject to NSPS Subpart D that combusts liquid petroleum pitch meeting the definition of fossil fuel must comply with all of the applicable provisions of NSPS Subpart D.

If you have any questions, call Zofia Kosim, P.E., of my staff at 202-564-8733.

cc: Fred Porter, OAQPS
Leslye Fraser, OGC
Stephen Rothblatt, Region 5

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

FEB 6 1996

Orig - Carrie Rothblatt

REGULATION DEVELOPMENT BRANCH
U.S. EPA, REGION V

OFFICE OF
ENFORCEMENT AND
COMPLIANCE ASSURANCE

MEMORANDUM

SUBJECT: Alternative Standards for Valves Regulated by NSPS Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry and NESHAP Standards for Equipment Leaks - Applicability Determination

FROM: Bruce C. Buckheit for Janet L. Berrden, Acting Director
Air Enforcement Division (2242A)
Office of Regulatory Enforcement

TO: Stephen Rothblatt, Chief
Regulation Development Branch (AR-18J)
Air and Radiation Division
Region V

The Air Enforcement Division agrees with Region V that the results of leak detection inspections conducted by U.S. EPA and/or State personnel as well as by the source should be determinative of compliance with the Alternative Standards for Valves contained in the New Source Performance Standards (NSPS) for Equipment Leaks of Volatile Organic Compounds (VOC) in the Synthetic Organic Chemicals Manufacturing industry, 40 C.F.R. Part 60, Subpart VV, Section 60.483-2, the National Emission Standard for Hazardous Air Pollutants (NESHAP) Standard for Equipment Leaks, 40 C.F.R. Part 61, Subpart V, Subsection 61.243-2 and other regulations that may reference these standards. Compliance with the alternative standards can be determined by the source or an authorized state or EPA inspector. If either compliance determination reveals that the alternative standard is not being met, that is, that greater than 2 percent of the valves in the process unit are leaking, then the source must revert back to the monthly leak detection inspection system for that process unit as specified in both the NSPS Subpart VV and NESHAP Subpart V, Sections 60.482-7 and 61.242-7.

The conventional method of monitoring leaks at NSPS Subpart VV and NESHAP Subpart V facilities is to begin by monitoring subject valves on a monthly basis (NSPS 40 C.F.R.§60.482-7 and NESHAP 40 C.F.R. §61.242-7), until two consecutive months of monitoring show that a valve is not leaking, at which time the

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owner or operator may monitor that valve on a quarterly basis instead of a monthly basis. 40 C.F.R. §60.482-7(c) and 40 C.F.R.§61.242-7(c). EPA assumed that most valves would quickly move into the quarterly monitoring category.

If two percent or fewer of the valves at a process unit are found to be leaking for at least two consecutive quarters or longer, then the owner/operator may elect to monitor less frequently (semi-annually or annually). 40 C.F.R. §61.243-2(b) and 40 C.F.R. §60.483-2(b). Note that the affected facility for the NSPS provision is a process unit, just like the NESHAP, not the entire plant site. 40 C.F.R.§60.480(a)(2). If the leak detection rate for valves at a process unit exceeds 2 percent, then the owner/operator must revert to monthly monitoring of the valves for that process unit. 40 C.F.R.§60.483-2(b)(4) and 40 C.F.R.§61.243-2(b)(4). The method of calculating the percent of leaking valves is to compare the number of leaking valves to the total number of valves in the process unit. 40 C.F.R.§60.483-2(b)(5) and 40 C.F.R. §61.243-1(c)(3). Notice and other requirements must also be met.

These regulations intend that compliance with all provisions should be determinable by inspections and review of records and other methods. 40 C.F.R. §60.482-1(b) and 40 C.F.R. §61.242-1(b). Therefore, if leak detection rates in excess of 2 percent at a process unit are discovered by state or EPA inspectors, and the source is informed of this finding, then the source must return to monthly leak detection inspections. Any suggestion by the source, or others, that the only leak detection analysis that is valid is the analysis conducted by the source is wrong. That would render the inspector's findings of no value. Such a conclusion is contrary to the intention of these regulations.

If you have any questions about this applicability determination, please contact Charles Garlow of my staff at 202-564-1088.

cc: Kathy Keith
Region V

State of New Hampshire
DEPARTMENT OF ENVIRONMENTAL SERVICES
6 Hazen Drive, P.O. Box 95, Concord, NH 03302-0095
603-271-3503 FAX 603-271-2867
TDD Access: Relay NH 1-800-735-2964

NHDES

November 17, 1995

Mr. Steve Gerritson, Exec. Director
LADCO
2350 E. Devon Ave., Suite 242
Des Plaines, IL 60018

Re: Recent Draft Information on NOx Control Costs for Utility Boilers for OTAG from the Control Technologies and Options Workgroup; Section 8 - Summary Matrix of Cost and Performance

Dear Mr. Gerritson:

I recently have had the opportunity to review a copy of the draft of Section 8 - Summary Matrix of Cost and Performance from the Control Technologies and Options Workgroup. It contains several inaccuracies and misrepresentations. Thus, I offer the following comments on both the matrices and the narrative information contained in the draft.

Layout of the Tables

The layout of the data tables is misleading and probably will be confusing to the uneducated since the tables include cost effectiveness and performance data for single control strategies and for multiple control strategies applied sequentially. I think that the matrices would be clearer if the pre-RACT information was presented prior to the post-RACT information or the pre-RACT and post-RACT information was presented on separate matrices. The use of NOx% and delta NOx% in the same matrix in conjunction with pre-RACT and post-RACT data is also confusing. For example, for a baseloaded, 65% capacity factor, wall-fired boiler burning coal, post-RACT SCR NOx% is listed as 60-80% with $/ton of 2400-3500 and $/kW of 65-100, and pre-RACT SCR NOx% is listed as 60-80% with $/ton of 1300-2800 and $/kw of 65-100. Unless one assumes that the costs of the SCR are higher in the post-RACT case since less tons of NOx are left for the SCR to remove, it is difficult to rationalize these costs.

Furthermore the built in assumption that pre-RACT is no controls and post-RACT is low NOx burners and/or low NOx burners with overfire air presents all cost data for other technologies in an unfavorable light since it implies that RACT is limited to low NOx burners and/or low NOx burners with overfire air. For PSNH's Unit #2 at Merrimack Station (MK2), RACT was determined to be SCR, because costs per ton removed were well below the presumptive norm of $2,500.

AIR RESOURCES DIV.
64 No. Main Street
Caller Box 2033
Concord, N.H. 03302-2033
Tel. 603-271-1370
Fax 603-271-1381

WASTE MANAGEMENT DIV.
6 Hazen Drive
Concord, N.H. 03301
Tel. 603-271-2900
Fax 603-271-2456

WATER RESOURCES DIV.
64 No. Main Street
P.O. Box 2008
Concord, N.H. 03302-2008
Tel. 603-271-3406
Fax 603-271-6588

WATER SUPPLY & POLLUTION CONTROL DIV.
P.O. Box 95
Concord, N.H. 03302-0095
Tel. 603-271-3503
Fax 603-271-2867

Footnote #18

Footnote #18 on the bottom of Page 35 implies that process conditions anticipated for the majority of cyclone units will pose greater difficulties for the use of SCR than they did for PSNH's MK2. If your Workgroup was more familiar with the design and process conditions at MK2, they would quickly realize that the exact opposite is more the case. The choices of NOx control technology available for retrofit on MK2 were limited by the unique internal design of the unit. Many, if not most, other cyclone boilers will not face the daunting constraints that MK2 faced, and therefore will pose less of a challenge and will be less costly to retrofit. MK2 also faced difficluties in retrofit due to the limited physical space available for installation of the SCR system. In addition, overall installation costs for the SCR system were increased due to the incredibly short time schedule (only 12 total months from design to operation, divided almost equally between design and installation) for installing the SCR prior to New Hampshire's May, 1995 NOx RACT deadline.

Furthermore, it is critical to note that the SCR system installed at MK2 was sized large enough so that only additional catalyst need be added to meet Phase II NOx control requirements. Therefore, the reported capital costs include most of the fixed costs for Phase II compliance. While the overall reactor layout might be classified by some as presenting a moderate degree of difficulty, I would suggest that the opinions of the engineers responsible for the design and installation of this SCR and a review of its footprint drawings would lead one to the conclusion that the degree of difficulty was substantially understated. It should also be noted that the distances between MK2's boiler and its electrostatic precipitator (ESP), and between the ESP and MK2's stack, are severely limited.

In addition, New Hampshire objects to the use of the words "artificially low" in reference to the calculated removal cost per ton. While the initial baseline may have been as high as 2.6 lbs/MMBTU, PSNH was able, through the application of operational changes, to reduce the uncontrolled emission rate to 2.0 lbs/MMBTU prior to SCR, and it still was determined that the installation of SCR was economically feasible and therefore RACT.

Overall

My overall impression of the information presented is that:

1. It is biased and inaccurate in its implication that NOx RACT is limited to low NOx burners and/or low NOx burners with overfire air;

2. It overstates the costs for fuel switching; and

3. It overstates the costs for the installation of SCR on MK2; and

4. It implies that other facilities using cyclone boilers would encounter greater difficulties with SCR than MK2.

I suggest that the authors revisit the database, review the recently released joint EPA/MARAMA/NESCAUM report "Phase II NOx Controls for the MARAMA and NESCAUM Regions", and collect additional information from sources located not only in the U.S., but overseas in Germany and Japan where SCR has been used successfully, and economically, for many years. It is now clear that SCR can be easily implemented on U.S. coal burning units at costs well under $2,500/ton.

In short, New Hampshire has debunked the myth that SCR cannot work on U.S. coal. New Hampshire has also has debunked the myth that SCR cannot work on wet-bottomed, coal-fired, cyclone boilers. How many more myths have to be debunked before adequate NOx controls will be installed on utility boilers upwind of New Hampshire?

Please feel free to contact my staff if you need any help in securing the NOx emissions data recommended above, or if you have any questions about these comments.

Sincerely,

Kenneth A. Colburn

Kenneth A. Colburn
Director
Air Resources Division

KAC/AMB/jtf

cc: Gov. Stephen Merrill
Rep. Jeff MacGillivray, NH Legislature
Bob Varney, NH Commissioner
Mary Gade, IL Commissioner
Don Schregardus, OH Commissioner
Bob Shinn, NJ Commissioner
Jason Grumet, NESCAUM
Bruce Carhart, OTC
Mary Nichols, US EPA
John Seitz, US EPA
John DeVillars, EPA-New England
Susan Studlien, EPA-New England
Carl DeLoi, EPA-New England
Marilyn Eckert or Lynne Dayton, Walcoff & Associates (for distribution to Workgroup Members)

OhioEPA
State of Ohio Environmental Protection Agency

P. Box 1049, 1800 WaterMark Dr
Columbus, Ohio 43266-0149
(614) 644-3020
FAX (614) 644-2329

George V. Voinovich
Governor

Donald R. Schregardus
Director

September 23, 1994

Mr. David G. Ellison
Manager Environmental Engineering
American National Can
2301 Industrial Drive
P.O. Box 702
Neenah, Wisconsin 54957-0702

Dear Mr. Ellison:

I am responding to your August 1, 1994 letter regarding the regulatory requirements for the generation of ozone emissions from corona treaters. The corona treaters are used to impact an electrostatic charge to film substrates.

Your August 1 letter posed the following questions:

1. Are ozone emissions from corona treaters regulated under the Clean Air Act?

2. If the emissions are regulated is a permit required?

3. If the emissions are regulated are controls required?

Under the Clean Air Act, the U.S. EPA has developed a National Ambient Air Quality Standard (NAAQS) for ozone, and consequently is considered to be a regulated pollutant. Due to the fact that other pollutants contribute to the development of ozone, it was necessary to develop regulations for these pollutants in order to control ozone formation. The regulated pollutant for ozone is the volatile organic compound (VOC). As your letter acknowledges, there are different ways in which ozone can be formed (e.g. photochemically generated ozone, and ozone generated naturally by lightning). It is important to note, however, that once formed, photochemical ozone and natural ozone are indistinguishable. In other words, once ozone is in the air neither a person's lungs nor an ambient air monitor would be able to distinguish the origin of the ozone.

It is a separate issue whether a permit is required for ozone generators. The Ohio EPA has previously issued permits for sources of ozone. While we do not have specific State regulations which address ozone emissions, our Permit to Install (PTI) rules (Ohio Administrative Code (OAC) Chapter 3745-31) define "air contaminant" to mean particulate matter, dust, fumes gas, mist, smoke, vapor, or odorous substances, or any combination thereof. Clearly, ozone falls under this definition

and hence new sources of ozone are required to obtain a PTI (unless the source is specifically exempted under the new "De Minimus" exemption - OAC 3745-15-05). Consequently, ozone generators (regardless of the method in which ozone is formed) are not excluded from complying with any pertinent regulatory requirements.

One of the requirements for obtaining a PTI in the State of Ohio is that the company must utilize the Best Available Technology (BAT) in order to insure that air contaminant emissions will be controlled to the maximum extent possible. It is true that the Ohio EPA does not currently have any State regulations which require ozone generators to meet certain standards. However, the primary goal of our agency is to ensure that there will not be a violation of the NAAQS. Clearly, it would not be acceptable to allow an ozone emission source to cause a violation of the ozone standard. Consequently, depending on the amount of ozone generated, add-on pollution controls may be required to satisfy both the BAT requirement as well as to insure that there will not be a violation of the NAAQS.

Based on the above analysis, it is the determination of this agency that the corona treaters employed at your facility do in fact constitute an "air contaminant source" as defined in OAC Rule 3745-31-01(D), and consequently American National Can is required to obtain the appropriate air permits (i.e. PTI and Permit to Operate) in order to legally operate these units.

If you have any questions in regards to this determination, please contact Mr. Michael Hopkins who is the Section Manager of the Air Quality Modeling & Planning Section within the Division of Air Pollution Control at (614)644-2270.

Sincerely,

Robert Hodanbosi

Robert F. Hodanbosi, P.E.
Chief,
Division of Air Pollution Control

RFH/MH/JB

cc: Michael Hopkins, AQM&P
Don Cavote, CDO

OhioEPA INTER-OFFICE COMMUNICATION

Ohio Environmental Protection Agency
Central Office, Division of Air Pollution Control

LAA Directors and District Air Unit Supervisors

FROM: Michael Hopkins, P.E.
Manager, Air Quality Modeling and Planning Section

DATE: February 22, 1996

Source Compliance with SO_2 FIP Emission Limits

This is a reminder that sources in several areas of Ohio may have two sulfur dioxide emission rates, one from OAC 3745-18 and another in the federally developed implementation plan WHERE USEPA HAS NOT APPROVED THE STATE LIMITS. In cases where these limits are different sources must comply with BOTH limits (See Engineering Guide #2, attached).

A list of counties or individual facilities having unapproved State limits is also attached. Please review this list and confirm that current operating permits for the affected sources require compliance with all SO_2 emission limits.

As an example: The Butler County SO_2 State Plan (OAC 3745-18-15) was not approved by USEPA. Thus, sources in Butler County must currently comply with the emission limits in the State Plan AND any applicable federal limits in 40 CFR 52.1881(b)(17). [Note: While new emission limits for Butler County are being developed for eventual federal approval, the existing federal limits remain effective until final approval of the revised State Plan by USEPA.]

If you have any questions regarding SO_2 requirements, please contact either Tom Tucker, at (614)644-3699, or myself, at (614)644-3611. Thank you.

cc: Bob Hodanbosi, DAPC
Jim Orlemann, DAPC
Safaa El-Oraby, DAPC
Alan Lloyd, DAPC
Misty Parsons, DAPC

Ohio EPA

Division of Air Pollution Control

Engineering Section

Engineering Guide #2

Question:

Can a permit to operate be issued to a source which is currently in compliance with Ohio EPA sulfur dioxide regulations but which is not in compliance with applicable U.S. EPA sulfur dioxide regulations? (This question was submitted by Don Moline, of the Toledo Environmental Services Agency, on October 19, 1979.)

Answer:

No.

A permit to operate is required in order to operate an air contaminant source, unless that source is granted a variance under OAC rule 3745-35-03 or exempted under rule 3745-35-05. A permit to operate may be issued only if it has been determined that the source is in "compliance with applicable air pollution control law." The issue presented here is whether or not "applicable air pollution control law," as used in OAC rule 3745-35-02(C)(1), also encompasses the applicable U.S. EPA rules and regulations.

The term "applicable air pollution control law" is defined in OAC rule 3745-35-01(B)(2) to include "Chapter 3704. and 3745. of the Ohio Revised Code, as amended; rules and orders of the Ohio environmental protection agency; the Clean Air Act, as amended; and rules and regulations of the administrator of the United States environmental protection agency." Therefore, a permit to operate cannot be granted to a source unless that source is in compliance with both the currently effective Ohio EPA and U.S. EPA sulfur dioxide limitations.

EL/JO/vs

December 13, 1979

(reviewed & revised March 19, 1986)

USEPA SO2 SIP APPROVAL STATUS (FIP AREAS)

Counties where USEPA has taken "No Action" or has "Disapproved" the Ohio SO2 SIP for the entire county.

Butler County
**** Cuyahoga County
Franklin County
Mahoning County
Stark County
**** Summit County

Counties where USEPA has taken "No Action" or has "Disapproved" the Ohio SO2 SIP for specified facilities.

Adams County: DPL Stuart Plant
Allen County: Cairo Chemical
Clermont County: CGE Beckjord Plant
**** Coshocton County: CSPC Conesville Plant
**** Gallia County: OVEC Kyger Creek Plant
OP Gavin Plant
**** Lake County: Ohio Rubber
CEI Eastlake Plant
Painesville Municipal, Boiler #5
Lawrence County: Allied South Point Plant
**** Lorain County: OE Edgewater Plant
CEI Avon Lake Plant
US Steel, Lorain Plant
BF Goodrich
Lucas County: Gulf Oil
Coulton Chemical
Phillips Chemical
Sun Oil
Montgomery County: Miami Paper
Bergstrom Paper
Pike County: Portsmouth Gaseous Diffusion Plant
(??? Ross County: Mead Corporation)
(??? Sandusky County: Martin Marietta)
Washington County: Shell Chemical
Wood County: Libby-Owens-Ford Plant Numbers 4,6, and 8

(???) These facilities are excepted from the Approval list, but are on neither the "No Action" nor the "Disapproval" lists
**** Nonattainment Area

[JTT:SO2FIP-4/5/94]

OhioEPA
State of Ohio Environmental Protection Agency

P.O. Box 163669, 1800 WaterMark Dr.
Columbus, Ohio 43216-3669
(614) 644-3020
FAX (614) 644-2329

George V. Voinovich
Governor

JAN 2 3 1996

INTER OFFICE COMMUNICATION

DATE: ~~April 25~~ May 3, 1995

TO: District Offices and Local Air Agencies

FROM: Mike Hopkins - Manager, Air Quality Modeling and Planning Section

SUBJECT: Procedure to permit portable air pollution emissions units (sources) that request pre-approvals from Ohio EPA

On October 8th, 1993, the Director of the Ohio EPA signed the latest version of OAC rule 3745-31-05(F) which incorporated additional flexibility for the permitting of portable emissions units (sources). This flexibility allows owners or operators of portable emissions units to obtain pre-approvals from the Ohio EPA for new sites/locations other than their current or initial site. These pre-approvals would allow them to move quickly from one site to another without having to wait to obtain a new permit for and/or permission to locate and operate at each new site. This procedure is not applicable to portable thermal soil remediation emissions units.

DAPC has now developed the procedures necessary to implement this program. This memo is intended to provide the Local and District offices with the information they need to process site pre-approvals.

Attached are two documents. First, is a copy of a handout which field offices can distribute to companies who might want to relocate a portable source (Procedures for Obtaining Pre-approved Sites for Portable Air Pollution Emission Units (Sources)). This document explains the procedures which must be followed in order to get sites pre-approved. All field office staff should review this document carefully and fully understand the procedures.

Second, is a copy of the form field offices should use to process site approval requests (Recommendation for Obtaining Pre-approved Sites for Portable Air Pollution Emissions Units (Sources)). This form should be filled out completely and submitted to Clara Dailey, PMU for each site approval request. Clara's group will process it and issue either an approval or denial letter.

In deciding whether to recommend approval or denial, please review the requirements under OAC rule 3745-31-05(F) carefully. Make sure all of the requirements are met before recommending approval.

If you have any questions concerning this handout, please call Alan Lloyd at (614) 644-3613.

MH/all

Attachments

cc: Bob Hodanbosi, DAPC
Jeanne Mallett, DAPC
Clara Dailey, DAPC
Misty Parsons, DAPC
Jim Braun, DAPC
Tom Rigo, DAPC
Jim Orlemann, DAPC

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George V. Voinovich
Governor

PROCEDURES FOR OBTAINING PRE-APPROVED SITES FOR PORTABLE AIR POLLUTION EMISSIONS UNITS (SOURCES)

On October 8th, 1993, the Director of the Ohio EPA signed the latest version of OAC rule 3745-31-05(F) which incorporated additional flexibility for the permitting of portable emissions units (sources). This flexibility allows owners or operators of portable emissions units to obtain pre-approvals from the Ohio EPA for new sites/locations other than their current or initial site. These pre-approvals would allow them to move quickly from one site to another without having to wait to obtain a new permit for and/or permission to locate and operate at each new site.

The purpose of this handout is to provide clarification and guidance for the owners or operators of these types of emissions units when applying for pre-approved site approval. This procedure is not applicable to portable thermal soil remediation emissions units.

To obtain the necessary site approval from Local Air Agencies and Ohio EPA's District Offices, the owners or operators of these types of emissions units must employ the following procedure (See **Attachment A** for a flow diagram of the procedure):

Step 1:

If you (the owner or operators) do not have current Ohio EPA air permit(s) to install and operate, then you must first obtain these permits. To do this contact the field office that has jurisdiction over your facility (your home office location defines the field office jurisdiction). They will guide you in this process. See **Attachment B** for a map of the field office jurisdictions. (Note: The electronic version of this guidance will not have the map. Instead, you can use **Attachment E** to determine which field office is responsible for your facility.) If your home office is located out of state, then use the home office address submitted to the Secretary of State for registering your operations in the State of Ohio.

Step 2:

Select the sites that you want to get pre-approved.

Step 3:

Obtain permission and approval from the owner of the property of the new site(s) where you plan on locating your emission unit(s). This documentation can be obtained by filling out the attached "Portable Emissions Units New Site Owner Approval Form" (**Attachment C**). Instead of

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EPA 1613 (rev. 5/94)

using this specific form a letter containing the same information as is required by the form is acceptable.

Step 4:

Publish a notice in each local paper that publishes in the county where you plan to relocate. This notice alerts all interested parties that you desire to obtain a site pre-approval. An example of the required notice is attached as **Attachment D**. This notice must be published in a specific newspaper. To determine which newspaper first determine the county number from **Attachment E**. (The county number is in parenthesis under "Political Jurisdiction".) Then determine the newspaper using **Attachment F**. (Note, the electronic version of these instructions will not have Attachement F. You must contact Sara Geary at (614) 644-3627 to obtain a copy or to ask which newspaper to use.)

Step 5:

Submit to the Ohio EPA field office (Local Air Agencies and Ohio EPA's District Office) a request for permission to pre-approve the new site(s). This submission must include the following documentation:

1. A copy of the permit application for all air contaminant emissions units that will be operated at the current and or initial site and a list of proposed sites and equipment to be operated at the proposed sites

2. A copy of any current Ohio EPA air permit(s) to install and operate.

3. A demonstration that the emissions units to be operated at the proposed site(s) are equipped with Best Available Technology (BAT). BAT is a requirement under Ohio Administrative Code rule 3745-31-05 for all new emissions units. Most permits to install define BAT. For the purposes of this demonstration, an explanation that the emissions units will continue to employ BAT as defined in the permit to install is sufficient. If you do not understand what BAT is for your emissions units, then discuss this issue with your Ohio EPA field office (Local Air Agencies and Ohio EPA's District Offices) representative.

4. A demonstration that the owner of each proposed site has provided the emissions unit owner with approval or equivalent declaration that it is acceptable to the site owner to move the emissions unit to this proposed site(s). (The attached Portable Emissions Unit New Site Owner Approval Form or equivalent signed letter is acceptable.)

5. The proof of publication of the public notice(s) for each new site. (This documentation is usually sent by the newspaper after the notice is published to the person who request a public notice be inserted into the newspaper. If documentation is not sent by the newspaper,

then the owner or operator can obtained this documentation from the newspaper.)

Step 6:

Wait for the Ohio EPA to issue an approval letter for the site. Each approval notice will be issued with a bill for a $100.00 dollar processing fee. Site approval letter(s) are valid for three years and must be renewed.

Step 7: *(This step can only be done after you have received an approval letter from the Ohio EPA.)*

Notify the Ohio EPA field office (Local Air Agencies and Ohio EPA's District Office) which has jurisdiction (see Attachment B) over the new site(s) at least 15 days before you desire to move the emissions unit(s) to the new site(s). If after the fifteen (15) day notification period, no response to the request is received, the emissions unit may be moved to the new location and operation may commence (i.e., you do not have to wait on "permission" from the District Office or Local Air Agency once the fifteen day notification period expires).

Common Questions and Answers

Question: *What happens if a site approval request is not approved?*

Answer: *Any denial of a site approval request will be a proposed action and will include an explanation of the reason for the denial. You may contact the field office (Local Air Agencies and Ohio EPA's District Office) for additional clarification on the reasons for the denial. If you still believe the site should be approved, then you should appeal the decision. The appeal must be done within 30 days of the proposed denial letter and should be submitted to the Environmental Board of Review.*

Question: *If 5 contractors apply to get approval for one site (only one would get the job), can they go together and put one notice in the paper?*

Answer: *Yes, it would be the responsibility of all of the owners to go together to do the combined notice. (This would save on the cost of the public notice.)*

Question: *Could the 5 contractor's share the cost of the $100.00 fee associated with the approved sites?*

Answer: *No. Each would have to pay the $100 fee.*

Question: *Can I move my portable emissions unit 15 days after I first apply to get a site pre-approved?*

nswer: *No. You must first get the sites approved before you move. The 15 day notice is only after you have obtained the site pre-approval.*

Question: *If I move my portable emissions unit before obtaining approval what will happen?*

Answer: *This is a violation of air pollution rules and regulations. You are subject to possible fines and penalties.*

If you have any questions concerning this procedure, please contact one of the field offices listed in **Attachment B** or **Attachment E**.

MEH/ALL/

Attachments

04/25/95
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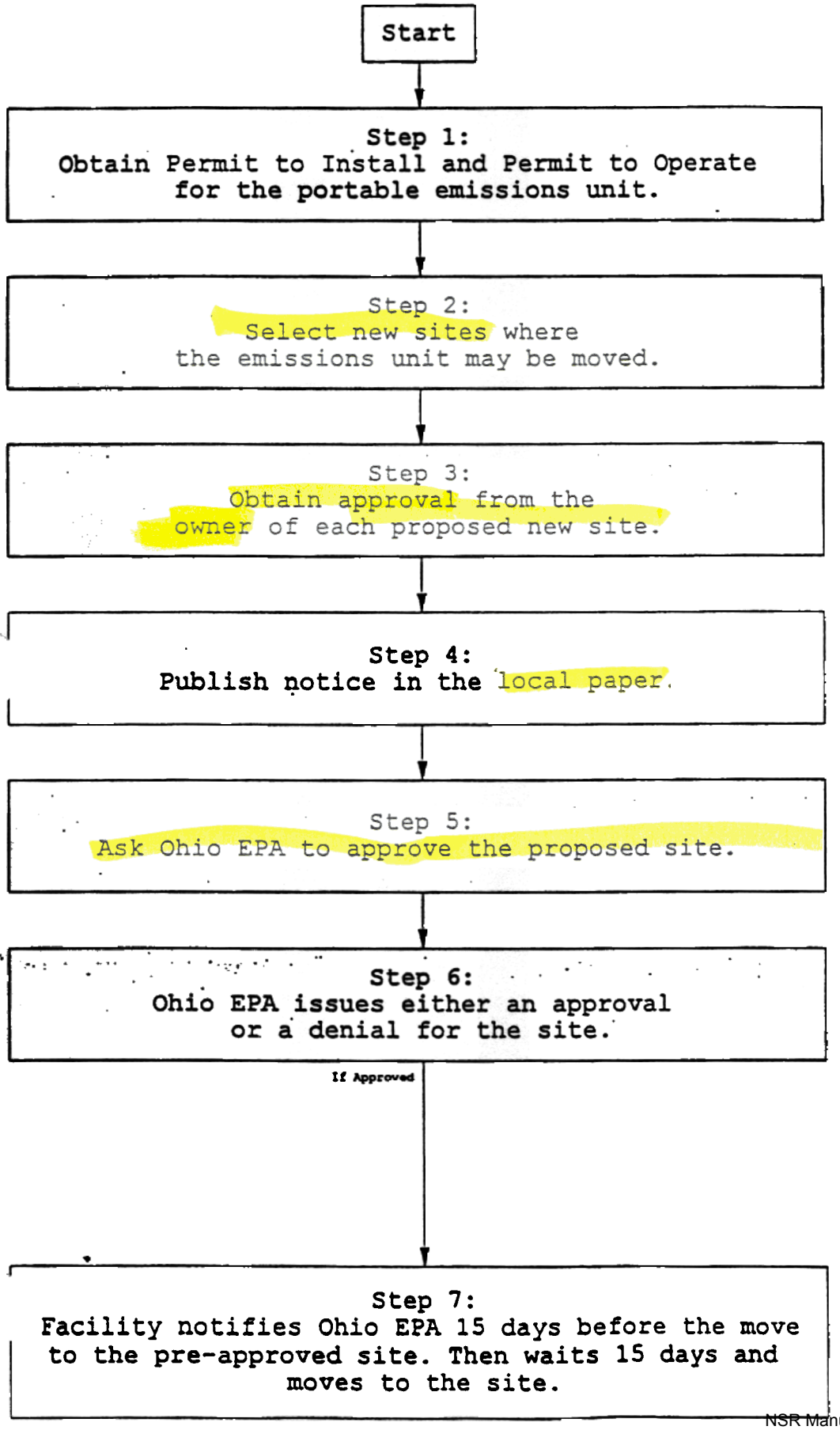
Portable Emissions Unit (Source) Site Authorization Preceedure

Attachment A



MEM/
portable.cht

AIR PERMIT REVIEW AGENCIES

This map shows jurisdictional boundaries. Shaded areas represent local agencies within Ohio EPA districts.

Local Air Pollution Control Agencies

Lynn Malcolm, Administrator
Akron Regional Air Quality Management District
177 South Broadway
Akron, Ohio 44308
(216) 375-2480 FAX#(216) 375-2402

Bruce Blankenship, Administrator
Air Pollution Control Division
Canton City Health Dept.-City Hall
420 Market Ave. North
Canton, Ohio 44702-1544
(216) 489-3385 or 489-3231
FAX#(216) 489-3335

Cory Chadwick, Program Manager
Dept. of Environmental Services
Air Quality Programs
1632 Central Parkway
Cincinnati, Ohio 45210
(513) 651-9437 FAX#(513) 651-9528

Robert Stalb, Deputy Commissioner
Division of the Environment
Dept. of Public Health & Welfare
1925 St. Clair
Cleveland, Ohio 44114
(216) 664-2324 FAX#(216) 664-2197

John Paul, Director
Regional Air Pollution Control Agency
Montgomery County Health Dept.
451 West Third Street
P.O. Box 972
Dayton, Ohio 45422
(513) 225-4435 FAX#(513) 225-3486

Don Walden, Director
Air Pollution Unit
Portsmouth City Health Dept.
740 Second St.
Portsmouth, Ohio 45662
(614) 353-5156 FAX#(614) 353-3638

Pat DeLuca, Director
North Ohio Valley Air Authority
814 Adams St.
Steubenville, Ohio 43952
(614) 282-3908
Ask to FAX a document

Lee Pfouts, Acting Commissioner
City of Toledo Division of Pollution Control
25 Main St.
Toledo, Ohio 43605
(419) 936-3015 FAX#(419)936-3016

OhioEPA District Offices

CDO — **Don Cavote, APC Supervisor**
Central District Office
3232 Alum Creek Drive
Columbus, Ohio 43207-3417
(614) 728-3778 FAX#(614) 728-3898

SEDO — **Fred Klingelhafer, APC Supervisor**
Southeast District Office
2195 Front St.
Logan, Ohio 43138
(614) 385-8501 FAX#(614) 385-6490

NEDO — **Dennis Bush, APC Supervisor**
Northeast District Office
2110 E. Aurora Rd.
Twinsburg, Ohio 44087
(216) 425-9171 FAX#(216) 487-0769

NWDO — **Gerald Rich, APC Supervisor**
Northwest District Office
347 North Dunbridge Road
Bowling Green, Ohio 43402
(419) 352-8461 FAX#(419) 352-8468

SWDO — **Phil Hinrichs, APC Supervisor**
Southwest District Office
401 E. Fifth St.
Dayton, Ohio 45402-2911
(513) 285-6357 FAX#(513) 285-6249

Attachment C

Portable Emissions Unit (Source) New Site Owner Approval Form

Background/Instructions

Under Ohio Administrative Code 3745-31-05(F), facilities that operate portable air pollution emissions units (sources) can get new sites pre-approved. This pre-approval allows companies to move the portable emissions unit to the new site in as little as 15 days. This process eliminates the sometimes lengthy approval time normally needed to get sites approved.

One of the requirements for site pre-approval is for the proposed site owner to give his/her permission to move the portable emissions unit to the site. This form is an approved method to document the site owner's granting of this permission.

***This form can be filled out** by **the** portable emissions unit **owner but must** be signed and dated by the proposed site owner.*

I, _____(Site Owner), owner of the

site located at _____ (Street),

_____ (City) do hereby give

_____ (Portable Emissions Unit Owner)

permission to locate the following air pollution emissions unit

on the above property:

Emissions Unit Description: _____

_____

Ohio EPA Facility ID Number: _____

Signed: _____ Date:

MEH/
portable/siteaprv

SAMPLE PUBLIC NOTICE LETTER FOR PORTABLE EMISSIONS UNIT ADVERTISEMENTS - TO BE SENT TO THE NEWSPAPER LOCATED IN THE COUNTY OF THE PROPOSED SITE (S).

<date>

<newspaper>
Legal Notice Department
<street>
<city>, <state> <zip>

Dear Sir:

Please print the attached public notice of the Ohio Environmental Protection Agency one time in the Legal Section of your newspaper the week of receipt, or as soon as possible, using the minimum space necessary in the Legal Section.

The bill for the advertisement cost should be submitted to:

<facility contact>
<facility name>
<facility address>

Please send TWO notarized copies of "Proof of Publication" to the address below.

Hearing Clerk
Ohio Environmental Protection Agency
P.O. Box 1049
Columbus, Ohio 43216-1049

Please send one (1) notarized copy of "Proof of Publication" to myself at the above address.

Please telephone at <facility phone> if you have any questions concerning this matter.

Sincerely,

<facility contact>
<facility Name>

Attachment

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SAMPLE PUBLIC NOTICE FOR PORTABLE EMISSIONS UNIT ADVERTISEMENTS - TO BE SENT TO THE NEWSPAPER LOCATED IN THE COUNTY OF THE PROPOSED SITE.

<county> COUNTY
PUBLIC NOTICE

The following were received/prepared by the Ohio Environmental Protection Agency (OEPA) last week. Effective dates of final actions and issuance dates of proposed actions are stated. Final actions may be appealed in writing within 30 days of the date of this notice to the Environmental Board of Review, Room 300, 236 East Town Street, Columbus, OH 43215. Notice of any appeal shall be filed with the Director within 3 days after the appeal to EBR. Proposed actions will become final unless a written adjudication hearing request is submitted within 30 days of the issuance date, or the Director revises/withdraws the proposed action. Any person may submit comments and/or request a meeting regarding any non-final action within 30 days of the date indicated. "Action", as used above, does not include receipt of a verified complaint. If significant public interest exists, a public meeting may be held. As to any action, including receipt of verified complaints, any person may obtain notice of further actions and additional information. Unless otherwise provided in notices of particular actions, all communications shall be sent to: Hearing Clerk, OEPA, P.O. Box 1049, Columbus, OH 43216-1049, phone number (614) 644-2129. Consult ORC Chapter 3745 and OAC Chapters 3745-47-12 and 3746-5 for requirements.

NOTICE OF INTENT TO RELOCATE A PORTABLE EMISSIONS UNIT
<COMPANY NAME>
<STREET>
<CITY>, OH <ZIP>
FACILITY DESCRIPTION: AIR
EQUIPMENT DESCRIPTION: <DESCRIPTION>
APPLICATION NO. 00-0000
DATE OF INTENT TO RELOCATE: <DATE>
COMMENTS TO: OHIO EPA, <DISTRICT OFFICE>, AIR POLLUTION GROUP, <DISTRICT ADDRESS>

OHIO EPA DISTRICT OFFICES & :AL AIR POLLUTION CONTROL AGENCIES

AGENCY NUMBER

01. *Ohio EPA, CDO*
Air Pollution Group
3232 Alum Creek Drive
PO Box 163669
Columbus, Ohio 43216-3669
(614) 728-3778

02. Ohio EPA, NEDO
Air Pollution Group
2110 East Aurora Road
Twinsburg, Ohio 44087
(216) 425-9171

03. Ohio EPA, NWDO
Air Pollution Group
347 North Dunbridge Road
PO Box 466
Bowling Green, Ohio 43402
(419) 352-8461

04. Toledo Environmental Control
26 Main Street
Toledo, Ohio 43605
(419) 936-3015

05. Ohio EPA, SWDO
Air Pollution Group
401 East Fifth Street
Dayton, Ohio 45402-2911
(513) 285-6357

06. Ohio EPA, SEDO
Air Pollution Group
2195 Front Street
Logan, Ohio 43138
(614) 385-8501

AGENCY NUMBER

07. *Air Pollution Group*
Portsmouth City Health Dept.
740 Second Street
Portsmouth, Ohio 45662
(614) 353-5156

08. RAPCA
451 West Third Street
PO Box 972
Dayton, Ohio 45422
(513) 225-4435

13. Bureau of Engineering Services
Div. of Air Pollution Control
1925 St. Clair
Cleveland, Ohio 44114
(216) 664-2324

14. Dept. of Environmental Services
Air Quality Program
1632 Central Parkway
Cincinnati, Ohio 45210
(513) 651-9437

15. Div. of Air Pollution Control
Canton City Health Dept.
420 Market Avenue, N.
Canton, Ohio 44702-1544
(216) 489-3385 or 489-3231

16. Air Pollution Control
177 South Broadway
Akron, Ohio 44308
(216) 375-2480

17. North Ohio Valley Air Authority - NOVAA
814 Adams
Steubenville, Ohio 43952
(614) 282-3908 or 282-3303

Ohio EPA

following list indicates which local agency or district office uld be contacted regarding filing for, modification to, or questi about air ...mits to Install, Permits to Operate and Variances.

POLITICAL JURISDICTION	AGENCY NUMBER	POLITICAL JURISDICTION	AGENCY NUMBER
Adams County (01)	7	Licking County (45)	1
Allen County (02)	3	Logan County (46)	5
Ashland County (03)	3	Lorain County (47)	2
Ashtabula County (04)	2	Lucas County (48)	4
Athens County (05)	6	Madison County (49)	1
Auglaize County (06)	3	Mahoning County (50)	2
Belmont County (07)	17	Marion County (51)	3
Brown County (08)	7	Medina County (52)	16
Butler County (09)	14	Meigs County (53)	6
Carroll County (10)	17	Mercer County (54)	3
Champaign County (11)	5	Miami County (55)	8
Clark County (12)	8	Monroe County (56)	17
Clermont County (13)	14	Montgomery County (57)	8
Clinton County (14)	5	Morgan County (58)	6
Columbiana County (15)	17	Morrow County (59)	
Coshocton County (16)	6	Muskingum County (60)	6
Crawford County (17)	3	Noble County (61)	6
Cuyahoga County (18)	13	Ottawa County (62)	3
Darke County (19)	8	Paulding County (63)	3
Defiance County (20)	3	Perry County (64)	6
Delaware County (21)	1	Pickaway County (65)	1
Erie County (22)	3	Pike County (66)	6
Fairfield County (23)		Portage County (67)	16
Fayette County (24)		Preble County (68)	8
Franklin County (25)		Putnam County (69)	3
Fulton County (26)	3	Richland County (70)	3
Gallia County (27)	6	Ross County (71)	6
Geauga County (28)	2	Sandusky County (72)	3
Greene County (29)	8	Scioto County (73)	7
Guernsey County (30)	6	Seneca County (74)	3
Hamilton County (31)	14	Shelby County (75)	5
Hancock County (32)	3	Stark County (76)	15
Hardin County (33)	3	Summit County (77)	16
Harrison County (34)	17	Trumbull County (78)	2
Henry County (35)	3	Tuscarawas County (79)	6
Highland County (36)	5	Union County (80)	
Hocking County (37)	6	Van Wert County (81)	3
Holmes County (38)	2	Vinton County (82)	6
Huron County (39)	3	Warren County (83)	14
Jackson County (40)	6	Washington County (84)	6
Jefferson County (41)	17	Wayne County (85)	2
Knox County (42)	1	Williams County (86)	3
Lake County (43)	2	Wood County (87)	3
Lawrence County (44)	7	Wyandot County (88)	3

Attachment E

County # in ( )

NEWSPAPERS

(01) **ADAMS**

The Peoples Defender
Legal Notice Dept.
P.O. Box 308
West Union, OH 45693
(513) 544-2391 #31-4278390
FAX (513) 544-2298

(02) **ALLEN**

The Lima News
Legal Notice Dept.
121 E. High St.
Lima, OH 45802
(419) 223-1010 #34-4466918
FAX (419) ~~229-0436~~ 222-6696

(03) **ASHLAND**

Ashland Times-Gazette
Legal Notice Dept.
40 E. Second St.
Ashland, OH 44805
(419) 281-0581 #34-0970410
FAX (419) 281-5591

(04) **ASHTABULA**

The Star Beacon
Legal Notice Dept.
4626 Park Ave.
Ashtabula, OH 44004
(216) 998-2323 #36-3619423
FAX (216) 992-9655

05) **ATHENS**

The Athens Messenger
Legal Notice Dept.
Route 33 N. & Johnson Rd.
Athens, OH 45701
(614) ~~592-4647~~ #31-4119320
592-6612 FAX (614) 592-4647

(06) **AUGLAIZE**

Wapakoneta Daily News
Legal Notice Dept.
P.O. Box 389
Wapakoneta, OH 45895
(419) 738-2128 #34-1602755
FAX (419) 738-5352

(07) **BELMONT**

The Times-Leader
Legal Notice Dept.
200 S. 4th St.
Martins Ferry, OH 43935
(614) 633-1131 #31-1006388
FAX (614) 633-1122

(08) **BROWN**

The News Democrat
Legal Notice Dept.
P.O. Box 149
Georgetown, OH 45121
(513) 378-6161 #31-0226040
FAX (513) 378-2004

(09) **BUTLER**

Hamilton Journal News
Legal Notice Dept.
228 Court St. ~~& Journal Sq./POB 298~~
Hamilton, OH ~~45012~~ 45011
(513) 863-8200
FAX (513) 863-7988

(10) **CARROLL**

Free Press Standard
Legal Notice Dept.
P.O. Box 37
Carrollton, OH 44615
(216) 627-5591 #34-1175334
FAX (216) 627-3195

Attachment F

NSR Manual Book 2 - Original Scan 11/2006
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NEWSPAPERS

(11) CHAMPAIGN

Urbana Daily Citizen
Legal Notice Dept.
220 E. Court St.
Urbana, OH 43078
(513) 652-1331 #31-0226480
FAX (513) 652-2448

(12) CLARK

Springfield Daily News
Legal Notice Dept.
202 N. Limestone St.
Springfield, OH 45503
(513) 323-3731 #31-0744851

(13) CLERMONT

The Clermont Sun WEEKLY on Thursday
Legal Notice Dept.
465 E. Main St.
Batavia, OH 45103 Cut-off 10AM Tuesday
(513) 732-2511 #31-0797356
FAX (513) 732-6344

(14) CLINTON

The News-Journal
Legal Notice Dept.
47 S. South St.
Wilmington, OH 45177
(513) 382-2574 #31-0226480
FAX (513) 382-4292

(15) COLUMBIANA

The Morning Journal
Legal Notice Dept.
308 W. Maple St.
Lisbon, OH 44432
(216) 424-9541 #34-012910
FAX " 0048" ~~Ext.~~ ~~245~~

(16) COSHOCTON

The Tribune
Legal Notice Dept.
550 Main St.
Coshocton, OH 43812
(614) 622-1122 #36-3514066
FAX (614) 622-7341

(17) CRAWFORD

Bucyrus Telegraph-Forum
Legal Notice Dept.
119 W. Rensselaer St., POB 471
Bucyrus, OH 44820
(419) 562-3333 #95-1140750
FAX (419) 562-9162

(18) CUYAHOGA

The Plain Dealer
Legal Notice Dept.
1801 Superior Ave.
Cleveland, OH 44114
(216) ~~344-4561~~ #34-0228575 216-999 4360
FAX (216) ~~694-6356~~ 999-6350

(19) DARKE

Greenville Daily Advocate
Legal Notice Dept.
309-11 S. Broadway, POB 220
Greenville, OH 45331
(513) 548-3151 #36-3514066
FAX (513) 548-3913

(20) DEFIANCE

Defiance Crescent-News
Legal Notice Dept.
624 W. 2nd St.
Defiance, OH 43512
(419) 784-5441 #34-4437590
FAX (419) 784-1492

N E W S P A P E R S

(21) **DELAWARE**

The Delaware Gazette
Legal Notice Dept.
18 E. William St.
Delaware, OH 43015
(614) 363-1161 #31-4379756
FAX (614) 363-6262

(22) **ERIE**

Sandusky Register
Legal Notice Dept.
314 W. Market St.
Sandusky, OH 44870
(419) 625-5500 #34-4346500
FAX (419) 625-1137

(23) **FAIRFIELD**

Lancaster Eagle Gazette
Legal Notice Dept.
P.O. Box 848
Lancaster, OH 43130
(614) 654-1321 #36-3514066
FAX (614) 654-8271

(24) **FAYETTE**

The Record-Herald
Legal Notice Dept.
138 S. Fayette St.
Washington C.H., OH 43160
(614) 335-3611 #31-0226480
FAX (614) 335-~~5328~~ 5728

(25) **FRANKLIN**

Columbus Dispatch
Legal Notice Dept.
34 S. Third St.
Columbus, OH 43215
(614) 461-5019 #31-4166990
FAX (614) ~~870-1947~~
461-7583

(26) **FULTON**

Fulton County Expositor
Legal Notice Dept.
201 N. Fulton St.
Wauseon, OH 43567
(419) 335-2010 #34-4241340
FAX - ~~NO~~ 419 335-2030

(27) **GALLIA**

Gallipolis Daily Tribune
Legal Notice Dept.
825 Third Ave.
Gallipolis, OH 45631
(614) 446-2342 #31-4384817
FAX (614) 446-3008

(28) **GEAUGA**

Geauga Times Leader
Legal Notice Dept.
111 Water St.
Chardon, OH 44024
(216) 286-6101 #36-3436513
FAX (216) 286-7521

(29) **GREENE**

Xenia Daily Gazette
Legal Notice Dept.
37 S. Detroit St., POB 400
Xenia, OH 45385
(513) 372-4444 #36-3514066
FAX (513) 372-3385

(30) **GUERNSEY**

The Daily Jeffersonian
Legal Notice Dept.
P.O. Box 10
Cambridge, OH 43725
(614) 439-3531 #31-4218030
FAX (614) 432-6219

NEWSPAPERS

(31) HAMILTON

The Cincinnati Enquirer
Legal Notice Dept.
617 Vine St.
Cincinnati, OH ~~45238~~ 45202
768-8184
(513) ~~721-2700~~ #06-1032273
FAX (513) ~~369-1841~~ 768-8350 8351

(32) HANCOCK

The Courier
Legal Notice Dept.
701 W. Sandusky St.
Findlay, OH 45840
(419) 422-5151 #34-4232610
FAX (419) 422-2937

(33) HARDIN

The Kenton Times
Legal Notice Dept.
P.O. Box 230
Kenton, OH 43326
(419) 674-4066 #34-4454724
FAX (419) 673-1125

(34) HARRISON

Harrison News Herald
Legal Notice Dept.
136 S. Main St.
Cadiz, OH 43907
(614) 942-2118 #34-1024392
FAX (614) 942-4667

(35) HENRY

Northwest-Signal
Legal Notice Dept.
P.O. Box 567
Napoleon, OH 43545
(419) 592-5055 #34-0972913
FAX (419) 592-9778

(36) HIGHLAND

Greenfield Times
Legal Notice Dept.
345 W. Jefferson St.
Greenfield, OH 45123
(513) 981-2141 #31-1120232
FAX (513) 981-2107

(37) HOCKING

Logan Daily News
Legal Notice Dept.
P.O. Box 758
Logan, OH 43138
(614) 385-2109 #31-0226480
FAX (614) 385-4514

(38) HOLMES

Holmes County Hub
Legal Notice Dept.
P.O. Box 151
Millersburg, OH 44654
(216) 674-1811 #34-0628530
FAX (216) 674-3780

(39) HURON

Norwalk-Reflector
Legal Notice Dept.
P.O. Box 71
Norwalk, OH 44857
(419) 668-3771 #34-4462401
FAX (419) 668-2424

(40) JACKSON

The Journal Herald
Legal Notice Dept.
295 Broadway St.
Jackson, OH 45640
(614) 286-2187 #31-4217070
FAX (614) 286-5854

N E W S P E R S

(41) JEFFERSON

The Herald Star
Legal Notice Dept.
401 Herald Sq.
Steubenville, OH 43952
(614) 283-4711 #36-3514066
FAX (614) 282-4261

(42) KNOX

Mt. Vernon News
Legal Notice Dept.
18 E. Vine St., POB 791
Mt. Vernon, OH 43050
(614) 397-5333 #31-4290300
FAX (614) 397-1321

(43) LAKE

Lake County News-Herald
Legal Notice Dept.
38879 Mentor Ave.
Willoughby, OH 44094
(216) 951-7653 #34-0365410
FAX (216) 951-0917

(44) LAWRENCE

The Ironton Tribune
Legal Notice Dept.
P.O. Box 647
Ironton, OH 45638
(614) 532-1441 #31-0969755
FAX (614) 532-1506

(45) LICKING

The Advocate
Legal Notice Dept.
22 N. 1st
Newark, OH 43055
(614) 345-4053 #36-3514066
FAX (614) 345-1634

(46) LOGAN

Bellefontaine Examiner
Legal Notice Dept.
P.O. Box 40
Bellefontaine, OH 43311
(513) 592-3060 #34-4491530
FAX (513) 592-4463

(47) LORAIN

The Chronicle Telegram
Legal Notice Dept.
225 East Ave.
Elyria, OH 44036
(216) 329-7000 #34-0365210
FAX (216) 329-7272

(48) LUCAS

Toledo Blade
Legal Notice Dept.
541 Superior St.
Toledo, OH 43660
(419) 245-6260 #34-4374555
FAX (419) 245-6438

(49) MADISON

The Madison Press
Legal Notice Dept.
305 Oak St.
London, OH 43140
(614) 852-1616 #31-0836703
FAX (614) 852-1620

(50) MAHONING

Youngstown-Vindicator
Legal Notice Dept.
P.O. Box 780
Youngstown, OH 44501-0780
(216) 747-1471 #34-0596870
FAX (216) 747-~~0399~~ 6712

N E W S . A P E R S

(51) **MARION**

The Marion Star
Legal Notice Dept.
150 Court St.
Marion, OH 43302
(614) 387-0400 #36-3514066
FAX (614) 382-2210

(52) **MEDINA**

Medina County Gazette
Legal Notice Dept.
P.O. Box 407
Medina, OH 44258
(216) 725-4166 #34-0840712
FAX (216) 725-4299

(53) **MEIGS**

The Daily Sentinel
Legal Notice Dept.
111 Court St., POB 729
Pomeroy, OH 45769
(614) 992-2157 #31-4384817
FAX (614) 446-3008

(54) **MERCER**

The Daily Standard
Legal Notice Dept.
P.O. Box 140
Celina, OH 45822
(419) 586-2371 #34-4363370
FAX (419) 586-6271

(55) **MIAMI**

Troy Daily News
Legal Notice Dept.
224 S. Market St.
Troy, OH 45373
(513) 335-5634 #31-0579918
FAX (513) 335-3552

(56) **MONROE**

Monroe County Beacon
Legal Notice Dept.
P.O. Box 70
Woodsfield, OH 43793
(614) 472-0734 #34-1205746
FAX (614) 472-0745

(57) **MONTGOMERY**

Dayton Daily News
Legal Notie Dept.
455 Ludlow St.
Dayton, OH 45402
(513) 225-2105 #31-0744948
FAX (513) 225-~~3048~~ 7316

Must call to ensure receipt of fax (fax machine is across the street)

(58) **MORGAN**

Morgan County Herald
Legal Notice Dept.
P.O. Box 268
McConnelsville, OH 43756
(614) 962-3377 #31-0675699
FAX (614) 962-6861

(59) **MORROW**

Morrow County Sentinel
Legal Notice Dept.
P.O. Box 149
Mt. Gilead, OH 43338
(419) 946-3010 #34-1407588
FAX (419) 947-7241

(60) **MUSKINGUM**

The Times Recorder
Legal Notice Dept.
34 S. Fourth St.
Zanesville, OH 43701
(614) 452-4561 #36-2708765
FAX (614) 452-0750

N E W S P A P E R S

(61) **NOBLE**

The Journal Leader
Legal Notice Dept.
P.O. Box 390
Caldwell, OH 43724
(614) 732-2341 #31-0954103
FAX - No

(62) **OTTAWA**

News Herald
Legal Notice Dept.
P.O. Box 550
Port Clinton, OH 43452
(419) 734-3141 #06-1032273

(63) **PAULDING**

Paulding Progress
Legal Notice Dept.
P.O. Box 180
Paulding, OH 45879
(419) 399-4015 #34-1503008
FAX - No

(64) **PERRY**

Perry County Tribune
Legal Notice Dept.
P.O. Box 312
New Lexington, OH 43764
(614) 432-4121 #34-1634***
FAX (614) 342-4204

(65) **PICKAWAY**

Circleville Herald
Legal Notice Dept.
P.O. Box 498
Circleville, OH 43113
(614) 474-3131 #31-0226480
FAX (614) 474-9525

(66) **PIKE**

The News Watchman
Legal Notice Dept.
P.O. Box 151 1-800-933-6502
Waverly, OH 45690
(614) 947-2149 #31-4217070
FAX (947-2140

(67) **PORTAGE**

The Record Courier
Legal Notice Dept.
P.O. Box 1201
Ravenna, OH 44266
(216) 296-9657 #34-1090825
FAX (216) 296-2698

(68) **PREBLE**

The Register Herald
Legal Notice Dept.
P.O. Box 120
Eaton, OH 45320
(513) 456-5555 #31-0226480
FAX (513) 456-3558

(69) **PUTNAM**

Putnam County Sentinel
Legal Notice Dept.
P.O. Box 149
Ottawa, OH 45875
(419) 523-5709 #34-16347***
FAX - No

(70) **RICHLAND**

Mansfield News-Journal
Legal Notice Dept.
70 W. 4th St.
Mansfield, OH 44901
(419) 522-3311 #34-0376030
FAX (419) 522-~~2673~~ 2672

NEWS PERS

71) ROSS
Chillicothe Gazette
Legal Notice Dept.
50 W. Main St.
Chillicothe, OH 45601
(614) 773-2111 #06-1032273
FAX (614) 773-2160

(72) SANDUSKY
Fremont News Messenger
Legal Notice Dept.
1700 Cedar St.
Fremont, OH 43420
(419) 443-5511 #06-1032273
FAX (4199) 332-9750

(73) SCIOTO
The Portsmouth Times
Legal Notice Dept.
P.O. Box 581
Portsmouth, OH 45662
(614) 353-3101
FAX (614) 353-7280

(74) SENECA
The Advertiser Tribune
Legal Notice Dept.
320 Nelson St., POB 778
Tiffin, OH 44883
448-3200. (419) ~~447-4455~~ #91-0899968
FAX (419) 447-3274

(75) SHELBY
Sidney Daily News
Legal Notice Dept.
911 Vande Mark Rd.
Sidney, OH 45365
(513) 498-2111 #34-4355690
FAX (513) 498-2006

(76) STARK
The Canton Repository
Legal Notice Dept.
500 Market St.
Canton, OH 44702
(216) 454-5611 #36-3514066
FAX (216) 454-5753

(77) SUMMIT
Akron Beacon Journal
Legal Notice Dept.
44 E. Exchange St.
Akron, OH 44309-0640
(216) 996-3000 #34-1095666
FAX (216) 996-3070

(78) TRUMBULL
Warren Tribune Chronicle
Legal Notice Dept.
P.O. Box 431
Warren, OH 44482-1431
(216) 841-1600 #22-2684993
FAX (216) 841-~~1831~~ 1639

(79) TUSCARAWAS
The Times-Reporter
Legal Notice Dept.
P.O. Box 667
New Philadelphia, OH 44663
(216) 364-5577 #34-0376030
FAX (216) 364-8449

(80) UNION
The Journal Tribune
Legal Notice Dept.
P.O. Box 226
Marysville, OH 43040
(513) 644-9111 (31-4378422
FAX (513) 644-9211

NEWSPAPERS

(81) VAN WERT

The Times-Bulletin
Legal Notice Dept.
700 Fox Rd., POB 271
Van Wert, OH 45891
(419) 238-6397 #31-0226480
FAX (419) 238-0447

(82) VINTON

Vinton County Courier
Legal Notice Dept.
N. Market St.
McArthur, OH 45651
(614) 596-5393 #31-4217070
FAX - ~~Same~~ 614-286-5854

(83) WARREN

The Western Star
Legal Notice Dept.
200 Harmon Ave.
Lebanon, OH 45036
(513) 932-3010 #31-0226480
FAX (513) 932-6056

(84) WASHINGTON

The Marietta Times
Legal Notice Dept.
700 Channel Lane
Marietta, OH 45750
(614) 373-2121 #06-1032273
FAX (614) 373-6251

(85) WAYNE

The Daily Record
Legal Notice Dept.
P.O. Drawer D
Wooster, OH 44691
(216) 264-1125 #34-1227535
FAX (216) 264-3756

(86) WILLIAMS

The Bryan Times
Legal Notice Dept.
Box 471
Bryan, OH 43506
(419) 636-1111 #34-4420719
FAX (419) 294-5608

(87) WOOD

The Daily Sentinel
Legal Notice Dept.
P.O. Box 88
Bowling Green, OH 43402
(419) 352-4611 #34-4351810
FAX - Same

(88) WYANDOT

The Daily Chief-Union
Legal Notice Dept.
P.O. Box 180
Upper Sandusky, OH 43351
(419) 294-2331 #34-4214940
FAX (419) 294-5608

RECOMMENDATION FOR OBTAINING PRE-APPROVED SITES FOR PORTABLE AIR POLLUTION EMISSIONS UNITS (SOURCES)

FACILITY I.D. _____

FACILITY NAME _____

FACILITY ADDRESS _____

_____

_____

PERSON TO CONTACT _____
ADDRESS

_____

_____

_____

EQUIPMENT DESCRIPTION _____

_____

_____

COMPANY I.D. _____

☐ APPROVE SITE ☐ DENIAL OF SITE

☞ if denied, state statue in violation _____

specific reason: _____

_____

_____

_____

LOCATION OF SITE: _____

_____

_____

_____

_____

☐ ADDITIONAL TERMS AND CONDITIONS FEE $100.00 (if approved)

1approv.sit

March 5, 1997
(AR-18J)

Peter J. Rasor
City of Indianapolis
Department of Public Works
Environmental Resources Management Division
Air Pollution Control Section
2700 South Belmont Avenue
Indianapolis, Indiana 46221-2097

Dear Mr. Rasor:

This is in response to your request for a determination on whether the principles of the September 6, 1995, United States Environmental Protection Agency (USEPA) memorandum titled "Calculating Potential to Emit (PTE) for Emergency Generators" can be applied to the new source review (NSR) program. The memorandum (enclosed) was developed to address issues related to the determination of a source's PTE under section 112 and title V of the Clean Air Act. The memorandum did not address NSR because a mechanism, minor construction permits, already exists for creating PTE limits for that program.

It seems reasonable to assume that the principles of this memorandum can also be applied to the NSR program since the definition of a source, in all cases, is derived from the same section (302(j)) of the Clean Air Act. The memorandum, however, cautions that "this guidance is ... not intended to discourage permitting authorities from establishing operational limitations in construction permits when such limitations are deemed appropriate or necessary."

Therefore, even though the basic principles of this memorandum can be applied to NSR, USEPA recommends that, where a mechanism such as minor construction permitting exists to clearly define a PTE limit, it should be the vehicle for creating such limits rather than the September 6, 1995, policy statement. In addition, the source still must comply with any minor construction permit requirements to which a 500 hour emergency generator may be subject. Keep in mind that the September 6, 1995, policy statement was developed to relieve the permit review authority from the extra burden of issuing a permit for synthetic minor purposes. But, in a case where a construction permit will be issued anyway, it is best to include the synthetic minor limitations in the permit. The source must also assure that operating the emergency generator would not cause a short term violation of the national ambient air quality standards.

If a source is subject to construction permit requirements despite the emergency generator, USEPA encourages including the limit on an emergency generator's hours of operation in the permit. The addition of this limit would not cause any unnecessary burdens on the source and would provide clarity and completeness to a construction permit.

I hope this information is useful. If you have any questions concerning this issue, please call Sam Portanova, of my staff, at (312) 886-3189.

Sincerely yours,

/s/

Cheryl L. Newton, Chief
Permits and Grants Section

Enclosure

cc: Boris Sonkin
City of Indianapolis
Department of Public Works
Environmental Resources Management Division
Air Pollution Control Section

Paul Dubenetzky, Chief
Air Permits Branch
Office of Air Management
Indiana Department of Environmental Management

Image Not Available

Image Not Available

cc: Misty Ryan SARA Mike H

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

1996

FEB 28 1996

AIR ENFORCEMENT BRANCH,
U. S. EPA, REGION 5
ASSISTANT ADMINISTRATOR
FOR ENFORCEMENT AND
COMPLIANCE ASSURANCE

MEMORANDUM

TO: Director, Office of Ecosystem Protection, Region I
Director, Air and Waste Management Division, Region II
Director, Air, Radiation, and Toxics Division, Region III
Director, Air, Pesticides, and Toxics Management Division, Region IV
Director, Air and Radiation Division, Region V
Director, Multimedia Planning and Permitting Division, Region VI
Director, Air, RCRA, and TSCA Division, Region VII
Assistant Regional Administrator, Office of Pollution Prevention, State and Tribal Assistance, Region VIII
Director, Air and Toxics Division, Region IX
Director, Office of Air, Region X

FROM: Julie Domike
Air Enforcement Division
Office of Regulatory Enforcement

SUBJECT: Discussion Paper on Potential to Emit

As mentioned on the Air Division Directors' conference call last week, attached please find a copy of the discussion paper on potential to emit that was distributed to members of the CAA Subcommittee on Permits, New Source Review and Toxics Integration earlier this month. Your questions and comments on this concept paper should be directed to Tim Smith of OAQPS at (919)541-4718, Jim Ketcham-Colwill of OPAR at (202)260-8950, Adan Schwartz of OGC at (202)260-7632, or me at (202)564-6577.

Attachment

cc: Tim Smith
Jim Ketcham-Colwill
Adan Schwartz

Recycled/Recyclable
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January 31, 1996

Dear Members of the Subcommittee on Permits, New Source Review and Toxics Integration:

As many of you know, EPA has been carefully considering how to respond to recent court decisions regarding federal enforceability of potential to emit limits. These decisions have created a need for the Agency to clarify through rulemaking what constitutes an "effective" limit on a source's potential to emit air pollutants. We wish to enlist your help in this process. The Agency recognizes the need to move expeditiously to resolve any uncertainties that may have been created regarding the applicability of many CAA requirements.

At this stage, before drafting the rulemaking proposal package, we believe it is important to solicit the views of subcommittee members on the issues and options that should be considered. Staff have drafted the attached discussion paper to aid in this process.

The paper is intended to lay out the legal and policy issues that EPA will address in response to the court decisions. The paper discusses components that may be needed for a limit to be "effective" in ensuring that a source does not emit major amounts. The Agency believes that defining what makes a limit "effective" is our central task in the wake of the National Mining Association decision. In addition, the paper describes options for addressing the issues raised.

As part of EPA's response to the National Mining Association and Chemical Manufacturers' Association decisions, and as part of its continuing effort to reconsider its regulations and streamline them where possible, the Agency now is re-examining all aspects of EPA's historical policy on potential to emit limits. Accordingly, EPA is setting forth for serious discussion and consideration an option that would recognize "effective" state-enforceable requirements as limiting a source's potential to emit. The Agency also is presenting an option that would retain federal enforceability as a necessary condition of effective limits, but streamline administrative requirements for

creating such limits to address concerns raised in the past.

The Agency plans to issue a proposed rule that includes both these options, as well as proposing ways to address other issues that influence whether limits are effective. Taking comment on these options will ensure that all stakeholders have an opportunity to express their views on implications of different options for the regulated community, states and the public. The Agency's overarching goal is to establish a system that avoids unreasonable burdens on industry or states, and ensures that major sources of air pollution comply with Clean Air Act requirements that protect public health.

Discussion of these issues is planned for the next meeting of the subcommittee, which we anticipate will be scheduled for March. We look forward to hearing your thoughts and recommendations at the meeting. If any members wish to make comments in writing, we of course will be happy to review them.

Sincerely yours,

Steven A. Herman
Assistant Administrator
for Enforcement and
Compliance Assurance

Sincerely yours,

Mary D. Nichols
Assistant Administrator
for Air and Radiation

Attachment

"Effective" Limits on Potential to Emit: Issues and Options

January 31, 1996

Note to reviewers

This paper presents a discussion of the issues that EPA intends to address in response to recent court decisions by the D.C. Circuit on the subject of potential to emit limitations. This paper is intended as the first step in the development of a formal rulemaking proposal, and is intended to list and discuss various options for regulatory amendments that are available to the EPA as a result of these court decisions.

To aid the stakeholder discussion process, the paper presents options for addressing the issues raised in the court decisions. On the issue of federal enforceability, two distinct approaches are presented with specifics on how these two approaches could be implemented.

It is hoped that the critical review of the options will help identify the most important issues to be resolved in promulgating rulemaking amendments on this issue. Additionally, EPA hopes that the review will serve to identify areas of consensus among stakeholders on the importance of issues and the feasibility of solutions, particularly the ones EPA is offering in this document. The EPA would appreciate comments from stakeholders on whether there are any additional options and approaches, beyond those addressed in this paper, that should be discussed in the rulemaking process.

Because the primary purpose of the paper is to identify options, the paper presents only a minimal discussion of the rationale for each option. A more detailed rationale will be set forth in the preamble to the proposed rule.

I. Framing the issues: The NMA and CMA decisions and their implications

Several provisions of the Clean Air Act (CAA) require that "major" sources be regulated more stringently than sources that are non-major. A "major" source is defined for purposes of section 112, title V, and the title I new source review (NSR) and prevention of significant deterioration (PSD) programs as one that either "emits or has the potential to emit" above a specified amount. Because sources that are major are generally

subject to more stringent controls, the Act creates an economic incentive for many sources to limit their potential to emit so as to avoid those requirements.[1] The integrity of these limits is important to ensure that major sources comply with Clean Air Act emission control requirements, and that the reductions in air pollution expected from these requirements are actually achieved.

EPA regulations governing NSR and PSD programs have, since the 1970s, required that limitations[2] on potential to emit (PTE) be federally enforceable before they can be recognized under the Clean Air Act. Following the 1990 amendments to the Act, EPA promulgated regulations implementing section 112 and title V of the Act, both of which mirrored the NSR/PSD regulations in this respect. On July 21, 1995, the D.C. Circuit Court of Appeals issued a decision in National Mining Association v. EPA, in which it held that EPA had not adequately justified the requirement in the section 112 regulations that limits on PTE must be federally enforceable. The Court noted that, while EPA was correct in requiring PTE limits to be "effective," it had not adequately explained how federal enforceability furthered effectiveness. On September 15, 1995, the D.C. Circuit issued a summary decision in Chemical Manufacturers Association v. EPA, vacating and remanding relevant portions of the NSR/PSD rules in light of the NMA decision.

The NMA case makes clear that EPA has the authority and the obligation to ensure that only those limits that are "effective" in limiting emissions are considered in determining PTE. However, the meaning of the term "effective," as the Court used it, is not self-evident. EPA believes that the primary purpose of this rulemaking should be to incorporate the notion of "effectiveness" into the regulatory scheme in a manner that provides clear guidance to States and the regulated community.

Tens of thousands of small emitters lack the potential to emit major amounts even in the absence of controls. It is important to note that under the Clean Air Act these sources do not need to obtain a permit or other legal limit to avoid major source requirements. Therefore, the issues discussed in this paper are not relevant to these sources.

For simplicity, this paper uses the terms "limit" and "limitation" to refer to both operational restrictions such as limits on hours of operation or throughput and to emissions control devices. Also, references to States apply equally to local air pollution control districts.

EPA's overarching goal in conducting this rulemaking is to establish a system that provides administrative flexibility and avoids unnecessary paperwork while ensuring the effectiveness of limits on PTE that are used to avoid major source requirements under the Act. This rulemaking presents an opportunity to re-examine EPA's historical policy on PTE in its totality, to carry forward those elements of it that still make sense, and to explore innovative ideas for achieving this goal.

This rulemaking proposal will include two fundamental alternatives on the issue of federal enforceability. The first approach would recognize "effective" State-enforceable requirements as limiting a source's potential to emit. The second would retain federal enforceability as a necessary condition of effective limits, but take comment on options for streamlining administrative requirements for creation of federally enforceable limits.

Although the federal enforceability issue is rightly a focus of attention, EPA believes it is critical to recognize that the “effectiveness” of limits includes considerations other than who may enforce them. The requirement that limits on PTE be enforceable by EPA and citizens under the Act has historically been just one aspect of EPA's policy on PTE.[3] Effectiveness of limits is a multi-faceted concept that can be broken down into component parts.

Three overarching considerations govern the "effectiveness" of PTE limits:

- Enforceability as a practical matter. To be "effective," limitations must be written so that it is possible to verify compliance and to document violations when enforcement action is necessary. Therefore, a key issue is how to define minimum criteria that limits must meet to be "enforceable as a practical matter." A related question is

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The term "federally enforceable" historically has been used in two ways -- first, to refer narrowly to the authority of EPA and citizens to bring suit for a violation; and, second, to refer to the collective set of elements that the Agency believed contribute to effectiveness of limits (e.g., practical enforceability of limits, approval of state programs as meeting certain criteria, notice of proposed limits to the public and EPA, enforceability in federal court by EPA and citizens). Most of these other elements are separable from enforceability by EPA and citizens, and are treated separately in this paper.

whether procedural safeguards are necessary to ensure those criteria are met.

- Compliance incentive effectiveness. EPA believes that a limit cannot be deemed effective if there is insufficient incentive to comply with it.[4] The "effectiveness" of a limit, therefore, depends in part upon the strength of the incentive it provides for a source to comply -- which in turn is tied to the probability of an enforcement action in the event of a violation. The federal enforceability issue is related to this consideration.

- State program effectiveness. Whether the first two aspects of effectiveness are achieved is influenced by the effectiveness of a State program for issuing and enforcing PTE limits. The nature of a State's program affects whether PTE limits are typically issued in a form that is practically enforceable, and whether sources have substantial incentives to comply with their limits. Relevant factors include the State's permitting requirements and program "infrastructure," including the adequacy of its enforcement authority and the level of resources available. In question here is whether a State *program* should have to meet certain criteria in order for the limits it creates to be considered effective, and whether procedures to assure *program* effectiveness should be required.

This paper is structured around the three considerations listed above. Because a key question in the litigation was whether limits need be federally enforceable to be effective, this paper begins by discussing the effectiveness of limits in encouraging sources to comply.

II. Effectiveness of limits: Strength of compliance incentive

The EPA believes that, in order to be effective, a limit must carry with it a credible expectation of enforcement. This aspect of effectiveness, referred to here as "compliance incentive effectiveness," is not revealed by an examination of

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EPA assumes that a limit on potential to emit, in order to be cognizable, must be legally enforceable by an appropriate governmental entity. Though some have made the suggestion that even voluntary limitations should be recognized, EPA does not believe that calculation of a source's potential to emit in the future should take into account pollution control measures that can be freely disregarded.

the PTE limit itself and cannot be definitively evaluated through an up-front evaluation of a State rule or program. Rather, compliance incentive effectiveness is an ongoing consideration related to the strength of a State's enforcement program.

A central question arising from the court decisions is whether sufficient compliance incentives exist if EPA and citizens cannot directly enforce PTE limits in federal court in cases where a State's enforcement program fails to secure compliance with PTE limits. The conclusion that compliance incentive effectiveness is substantially improved through the enforcement authority of EPA and citizens was historically the basis for the requirement that limits on PTE be enforceable by EPA and citizens under the Act.

In light of the NMA and CMA decisions, EPA intends as part of the PTE rulemaking to propose the two options below as ways to ensure compliance effectiveness.

Under Approach 1, *State or locally enforceable limits*, EPA would give formal recognition to effective State limits, so long as the source owner and operator assume the responsibility for demonstrating that the limits are effective and that the source is complying with these limits. Under this approach, if a source failed to comply regularly with its State permit, EPA and citizens could not sue to enforce the permit, but the source would be in violation of major source requirements of the Clean Air Act.[5]

Under Approach 2, *Streamlined federal enforceability*, the EPA would substantially reduce the administrative objections that have been raised regarding the process currently required for limits to be recognized as federally enforceable. The Agency would consider changes that would enable sources to obtain relatively quickly and easily limits that are enforceable by EPA and citizens.

Approach 1: State or locally enforceable limits

EPA will consider proposing as part of Approach 1 several additional components described later in this paper. For example, State and local programs could be allowed to issue PTE limits without the program undergoing up-front EPA review. EPA would take comment on what requirements for public participation or notice to EPA, if any, may be appropriate for limits that are not federally enforceable.

1. Description of Approach

EPA would promulgate rule amendments that would recognize limitations that are enforceable by State and local air quality agencies as adequate to restrict a source's potential to emit, as long as the limits are enforceable as a practical matter. Under this approach, EPA and citizens could bring legal action in federal court alleging violations of the major source requirements of the Act in cases when a source fails to obtain or comply with State or local permits that are actually effective in restricting the source's PTE. Under this approach neither EPA nor citizens would have authority under the Clean Air Act to enforce directly the terms of the State or local permit.

In such an enforcement action, EPA or citizens would allege that a source is in violation of the Clean Air Act in that 1) the source would be a major source in absence of any limits on the source's PTE, 2) there are no effective PTE limits in place, or the source has failed to comply with limits that would be effective if complied with, and 3) the source has failed to comply with major source requirements.

In the case of a source which has State or local PTE limits that are not federally enforceable, the regulatory amendments would allocate the burden of proof to the source owner to demonstrate that 1) the source has such State or local limits, 2) that the limits meet EPA's definition of "enforceable as a practical matter," and 3) that the source has regularly complied with the limits. Such a demonstration would constitute an affirmative defense to the allegation that the source is operating as a major source without complying with major source requirements.[6]

This allocation of responsibility is consistent with case law holding that those seeking to be excluded from a generally applicable regulatory scheme bear the burden of establishing their entitlement to the exclusion. This approach has precedent in the RCRA program; 40 C.F.R. 261.2(f) provides that a person

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In the case of a source that has PTE limits which are federally enforceable, EPA or a citizen (rather than the source) would continue to have the burden of showing that the PTE limit is not effective as a practical matter or that the source has not complied with it. In other words, there would be no change from the current system when EPA or a citizen seeks to establish that a source with federally enforceable limits has violated either the PTE limits or major source requirements.

claiming an exemption [from a RCRA permitting requirement] has the burden of proof of establishing that he is entitled to the exemption. This regulation has been upheld and interpreted to include both the burden of producing evidence and the burden of persuasion (that is, the burden of convincing the judge of all elements of the case). See, United States v. Eastern of New Jersey, 770 F. Supp. 964, 978 (D.N.J. 1991); Hazardous Waste Treatment Council v. EPA, 862 F.2d 277, 289 (D.C. Cir. 1988), cert. den. 490 U.S. 1106 (1989).

Initially, EPA believes it could implement this approach through a rule provision stating that a PTE limit that is not complied with regularly will not shield the source from enforcement for operation as a major source. This would make clear that a State PTE limit that is not regularly complied with will not be considered effective, and therefore will not be considered in calculating the source's PTE if there is an enforcement action asserting that the source is major. This is the current law today for federally enforceable permits. In United States v. Louisiana-Pacific Corp., 682 F. Supp. 1122 (D. Colo. 1987), the Court determined that, where a source had not regularly complied with its minor source permit purportedly limiting PTE, that permit would not serve as a shield to liability for violation of PSD requirements, notwithstanding the fact that the permit was enforceable by EPA.

Approach 1 envisions that source owners would bear the responsibility for having effective limits for the entire time period during which a limit was needed (e.g. after commencing construction of a source for which such limits are needed to avoid major source preconstruction requirements). If it were later discovered by EPA or citizens that effective limits have not been in place, the source owner could not avoid enforcement actions for the time period associated with construction and initial operation by adding effective limits at a later date.

EPA plans to propose this approach as one alternative for satisfying its obligation to assure compliance incentive effectiveness. Among the issues to be examined in considering this option are:

- whether the EPA should require notice from the source or the State that the source is relying on a non-federally enforceable permit (i.e. a permit not directly enforceable by EPA and citizens in federal court) as a shield from a major source requirement.

- the extent to which the EPA should limit the use of such permits to facilities or companies that are otherwise in compliance with the Act;

- whether this option should be limited to permits issued by State or local authorities with authority to enforce the SIP.

2. Illustrative examples

The following examples illustrate how this option would be implemented:

Example 1. A source has a permit that is not federally enforceable. Material usage and content limits in the permit are enforceable as a practical matter, and the source did not obtain a PSD permit. However, the source regularly violates the material usage and content requirements in its permit. The source's records show that, although there may be no clear record as to whether the source has actually emitted 250 tons per year for any 12-month period, the source has the potential to emit 250 tons per year. Because the source did not comply with its State permit, EPA or citizens could bring enforcement action against the source for failure to comply with major source requirements of the Act.

Example 2. A source has a permit that is not federally enforceable and that requires use of a carbon adsorber to control VOC emissions. A federal inspector observes that the carbon adsorber is not being operated and maintained properly, and observes breakthrough (that is, no control) during the inspection. Upon review of the permit, it contains no requirement for any recordkeeping demonstrating that the carbon bed is being regularly regenerated. In addition, the owner can provide no evidence that the carbon bed is being maintained with sufficient regularity. The control device needs to operate at 70 percent or better to achieve minor source levels. For this case, the source would be subject to an enforcement action for violations of major source requirements. Even though there is no evidence that the source is regularly violating its limit, the burden is on the source owner to demonstrate that the source has an effective set of requirements that would allow the EPA or citizens to determine whether it was in violation.

Approach 2: Streamlined federal enforceability

1. Description of approach

Under this approach, EPA would retain the current requirement that PTE limitations must be federally enforceable, but streamline administrative requirements to address concerns that have been raised.

In light of the D.C. Circuit's holding that EPA has not adequately explained the need for federal enforceability, EPA would provide an enhanced rationale for how the federal enforceability requirement could be considered a reasonable means of ensuring compliance incentive effectiveness. In addition, the following specific steps would be taken to streamline the current administrative process for achieving federal enforceability of limits:

- EPA would finalize the amendments to 40 CFR 51.161 that were proposed on August 31, 1995 in order to provide States with explicit discretion to limit up-front public review in minor NSR programs to those situations deemed to be environmentally significant. EPA believes that current minor NSR programs allowing such discretion already create limits that can be enforced by EPA and citizens in federal court. The proposed rulemaking amendments would significantly broaden States' discretion to limit public review, and would eliminate any ambiguity or uncertainty that may exist over the enforceability of these permits.

- EPA would also make clear in rulemaking language that similar discretion would exist for federally enforceable State operating permit (FESOP) programs.

- States would not be required to provide EPA with an up-front notification before permits are issued in cases where public notice is not required. Rather, States would periodically (semi-annually or annually) provide EPA with a list of PTE limits that have been issued to sources seeking to avoid federal major source requirements. EPA would make this information available to the public.

- States would still be required to submit rules and programs to EPA for approval into the SIP. Rule amendments would guarantee that State limits issued under such program would be recognized from the time the limits were established, so long as the limits were enforceable as a practical matter. This would ensure that such limits would be recognized

during the time period for which EPA approval of the State program is pending.[7]

2. Issues discussion

a. State discretion on appropriate level of public review.

Among the objections to preserving federal enforceability of limits as a requirement is a perception that federal enforceability cannot be accomplished without requiring public review of any permit approval action which is taken to create limitations on potential to emit. The EPA believes that a permit limit can be enforceable by the EPA and citizens under the Clean Air Act even if the permit was not issued with public review. The EPA believes that States, as recently proposed with respect to the minor NSR and Title V programs, can be given broad discretion with respect to judgements on which actions establishing or revising PTE limits are of sufficient environmental significance to warrant up-front public review. The EPA plans to solicit comment on whether providing such discretion in all programs utilizing PTE limits would help to alleviate the administrative objections to retaining federal enforceability.

b. Voluntary acceptance of the federal enforceability of State limits

Another alternative to eliminate possible delay to the source would be to require that PTE limits be federally enforceable in order to be federally recognizable, but to allow sources to voluntarily accept the federal enforceability of a State limit. This would eliminate the need for approval of the underlying State program. EPA plans to explore the viability of this approach in the PTE rulemaking.

Compliance incentives and citizen enforcement

EPA plans to take comment in the rulemaking on two broad issues involving compliance incentives and citizen enforcement. The first issue is whether differing opportunities for citizen enforcement create significant differences in the strength of

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Historically, EPA has required that State programs be approved through rulemaking before the PTE limits established under that program could be federally recognized as limiting PTE. This has created potential adverse consequences for a source possessing a limit that is enforceable as a practical matter when the State's program has not yet been approved by EPA.

compliance incentives for sources under Approaches 1 and 2. A second issue, which arises under both approaches, is whether citizens have adequate access to the information needed to identify violators and bring successful enforcement suits.

Regarding the first issue, EPA has generally presumed that the possibility of citizen enforcement action enhances compliance with environmental laws. As part of the rulemaking, EPA plans to consider whether the prospect of citizen suits can enhance the compliance incentive effectiveness of limits on sources' potential to emit.

The ability of citizens to enforce permit requirements under Clean Air Act section 304 tracks that of the federal government. The Agency will request comment on the extent to which the presence or absence of federal enforceability affects citizens' practical ability to bring enforcement actions against sources in violation. In reference to Approach 1, the Agency will seek information on the number of States in which standing issues could prevent citizen suits to enforce PTE limits. EPA also is interested in whether citizens would be able to effectively enforce major source requirements in most circumstances under Approach 1.

The second broad issue relates to citizens' access to information. One difference between the federal government’s and citizens' opportunity to bring suit is the ability of the federal government to obtain access to facility information and records through subpoena and inspection powers. It has been suggested to EPA that the relatively few number of citizen suits under the CAA is due in part to inadequate access to records. To be able to enforce a source's limit, citizens need access to the permit and compliance records. To enforce the major source threshold, citizens also need information demonstrating that the source's potential or actual emissions exceed the major source threshold. The Agency will seek comment on the extent to which citizens currently have access to the information required, and on whether there are reasonable ways to enhance citizens' access to information under either Approach 1 or 2.

Information on a facility's potential to emit is particularly difficult for citizens to obtain. One possible way to address this problem would be to require a source or the State to provide notice to EPA when the source takes State or local limits on its PTE. Such notice might include a statement regarding the assumptions used in calculating the uncontrolled PTE, absent the State or locally required limits or control equipment. Citizens could then access such information through EPA. The Agency also will seek comment on providing safeguards

for claimed "proprietary business information" in releasing the notification to the public.

III. Practical enforceability of limits

Whether a PTE limit is “effective” depends in part on whether that limit is enforceable as a practical matter. EPA therefore believes that questions concerning enforceability as a practical matter will be among the most important addressed in the PTE rulemaking.

Definition of "enforceable as a practical matter"

Under either Approach 1 or Approach 2, the EPA would consider amending current rules to require that emission limitations used to limit a source's potential to emit be “enforceable as a practical matter.” The rule would require limitations to:

- be permanent;
- contain a legal obligation for the source to adhere to the terms and conditions;
- not allow a relaxation of a SIP requirement;
- be technically accurate and quantifiable;
- identify an averaging time that allows at least monthly checks on compliance (that is, monthly or shorter averages are encouraged; where this is unreasonable, longer averages would be required to be accounted for on a rolling monthly basis); and
- require a level of recordkeeping, reporting, and monitoring sufficient to demonstrate compliance with the limit.

In addition to these general criteria for ensuring that limits are verifiable and otherwise enforceable, the EPA intends to request comment on:

- Whether EPA regulations should more specifically describe the minimum elements of practicable enforceability. For example, should the regulations include language on the form in which limits must be expressed to be effective -- more specifically, principles from section III of EPA’s June 13, 1989 guidance on limiting potential to emit in new source permitting (e.g., restrictions on use of emission limits,

requirement that limits include operating parameters and underlying assumptions in cases where add-on controls operating at specified efficiency are required, independent enforceability of production and operational limits)?

- Whether EPA regulations should provide examples of terms that would be inappropriate in a PTE limit. For instance, the regulation might list as examples long-term (e.g. annual) emission rate limitations, limits that cannot be directly correlated with the relevant regulatory threshold (e.g. opacity limits to a PM threshold), or limits based on erroneous or unsupported generic emission factors.

EPA's initial thinking is that the rule would not provide specific requirements regarding the "appropriate level" of recordkeeping, reporting and monitoring, nor would the regulatory text list examples of situations that are prohibited. EPA notes that guidance issued on June 13, 1989, regarding practicable enforceability is still the most comprehensive statement from EPA on this subject. EPA would, within resource limitations, and with the help of State and local agencies, work to develop additional guidance where needed. In this regard the EPA would solicit comments on examples that could be provided in guidance or in the preamble to the final rule amendments.

IV. State program effectiveness

As stated above, the effectiveness of a State program affects both whether PTE limits are typically issued in a form that is practicably enforceable, and whether sources have substantial incentives to comply with their limits. Therefore, an issue to be addressed in the rulemaking is whether EPA should specify minimum effectiveness criteria that State programs must satisfy for the limits they create to be recognized as limiting PTE -- and if so, whether there should be a mechanism for EPA evaluation of these programs.

The Agency historically has required that State programs meet minimum criteria -- for legal authority, resources, and substantive and procedural aspects of permitting programs -- in order for the limits they create to be recognized as limiting PTE.

Some considerations influencing state program effectiveness are susceptible to evaluation before (or at the time) the PTE limits created by the program are relied upon by a source. These "front-end" considerations include questions of State air program "infrastructure," such as whether the program possesses adequate

resources and whether there exists adequate legal authority for enforcement. In addition, there are considerations related to the adequacy of each program or rule creating PTE limits -- specifically, rules governing the substantive and procedural aspects of permit issuance for individual sources, and "prohibitory" or "exclusionary" rules designed to limit the PTE of sources in particular categories.

Other considerations can only be evaluated on an ongoing basis -- notably, the effectiveness of State enforcement efforts in promoting compliance. This "back-end" aspect of State program effectiveness is discussed separately below.

Front-end considerations

1. Description of approaches

Under Approach 1, EPA would not require up-front review or approval of State or local rules or programs for creating PTE limits. EPA would presume that these programs possess an adequate infrastructure, adequate legal authority for enforcement, and adequate permitting procedures. EPA would take comment on whether it should maintain authority to deem a State program generally "ineffective" at any time if clearly identifiable deficiencies in one or more of these State program elements were present, based on criteria established by EPA. Such a remedy could be appropriate, for example, if a program issued significant numbers of permits that are not enforceable as a practical matter. The result of deeming a program ineffective could be to render ineffective all limits created by that program, or to render ineffective any limits issued after the date of the ineffectiveness finding. EPA would take comment on this issue and on procedures for determining that a State program is ineffective.

Under Approach 2, EPA would continue to evaluate State rules and programs that create PTE limits, with the streamlining changes described under the heading "Approach 2: Streamlined Federal Enforceability."

Under both Approach 1 and Approach 2, the EPA would require that an "effective limit" must be obtained from the agency generally responsible for air quality permits. Limitations from other State or local authorities could not be taken into account.

2. Criteria for State program effectiveness

a. Overview

EPA initially believes the front-end State program effectiveness issues to be addressed in the PTE rulemaking are the following:

- Should a State have devoted a certain level of resources before its program can be considered effective and therefore able to create PTE limits? EPA plans to solicit comment on this issue. Though it may be possible to determine on an audit basis whether a State's resources are adequate, the level of resources needed will be particular to a State's strategy for addressing PTE, and so cannot be specified in advance by EPA.

- Should a State be required to have adequate legal authority for enforcement before its PTE limit program can be considered effective?

- Should the State's permitting regulations be required to meet minimum criteria in order to be able to create PTE limits? In its June 28, 1989 Federal Register notice on PTE, EPA required State permitting programs to meet certain criteria in order to yield federally recognizable PTE limits. Relevant to this discussion, the programs could not allow for the relaxation of a limit in the SIP, and the program had ta provide for public and EPA notice of permit issuance. (See further discussion below.)

- Are there other criteria that should be met for a State program to be able to create PTE limits? EPA plans to solicit comment on this question.

b. Procedures ta ensure practical enforceability of limits

EPA will consider in the rulemaking whether procedural requirements are needed to help ensure that the limits issued by a State program are enforceable as a practical matter. If so, such procedures could be required either as necessary elements of an effective State program, or -- if there is na up-front review of State programs under Approach 1 -- as necessary conditions of an effective limit. The procedural issues that EPA is currently aware of concern notice and an opportunity for review by the public and EPA.

This paper already has described the way that EPA would address the public participation and EPA notice issues under its streamlined federal enforceability approach (see above). However, these issues arise whether or not PTE limits are required ta be federally enforceable. EPA plans to take comment and consider the appropriate way ta address these issues under

Approach 1. One option identified by EPA is that sources receiving State-enforceable PTE permit limitations that are not federally enforceable, or the State issuing these limits, could be required to notify the EPA within 3-6 months of the permit, and to provide the EPA with a copy of the permit. EPA notification and approval would not be required before the State could issue the permit or before that permit becomes effective. The EPA would provide the public access to the permits.

In connection with public participation and EPA notice, EPA plans to take comment on:

- whether there are types of permits for which a minimum level of public participation in establishment of PTE limits should be required, in view of EPA's August 1995 proposal regarding public comment in minor new source review programs.

- whether notice and an opportunity for EPA review carries with it additional certainty for the source that its limit will not later be found ineffective.

- whether notice to EPA of draft permits should be required, or whether EPA should instead rely on a system of auditing permits already issued.

Questions of public participation and EPA notice also are relevant to issuance of "prohibitory" or "exclusionary" rules designed ta exclude certain qualifying sources from major source requirements. As these generic rules limit the PTE for potentially large numbers of sources, public participation and prior notice to EPA of the proposed State or local rule may be appropriate whether or not limits are required to be federally enforceable. EPA will seek information on the extent ta which notice ta the public is already part of State rulemaking procedures. The Agency also will seek comment on whether notice to EPA of the draft or proposed rule would be reasonable and add certainty to sources’ reliance on generic rules.

3. Possible mechanisms for State program evaluation

If there are some substantive criteria for an effective State program, the rulemaking must also address whether there will be a mechanism for evaluation of the State program infrastructure. EPA initially sees three options.

1. EPA articulates minimum effectiveness criteria for State programs, but does not require prior approval of a State program before limits established by the State can be federally

recognizable. Instead, EPA audits State programs and retains the ability to deem a State program "ineffective" at any time.

2. EPA establishes minimum effectiveness criteria for State programs, and EPA establishes by rule a subsequent informal review and approval process (e.g., an exchange of letters between EPA and the State). Under this option, the process would be established as part of the original rule, but no additional case-by-case rulemaking would be needed for approval of individual State programs. State programs would be deemed effective upon approval as being capable of creating PTE limits.

3. EPA establishes minimum effectiveness criteria for State programs, and EPA formally reviews and approves programs through rulemaking. State programs would be deemed effective upon completion of the rulemaking.

EPA notes that, currently, many State PTE programs have already received approval through rulemaking. EPA expects that there would be na need ta re-evaluate these programs.

Back-end considerations: Effectiveness of State enforcement

The twa approaches described above for ensuring compliance incentive effectiveness -- "State and locally enforceable limits", and "streamlined federal enforceability" -- focus on sanctions available against a source directly when the source fails to comply with its PTE limit. EPA will alsa explore whether it should retain the ability to deem a State program "ineffective" where non-compliance with PTE limits is common due ta the lack of a credible State enforcement program. This option has historically been available to EPA because approval of PTE programs inta the SIP allows EPA to withdraw that approval where appropriate, and would be retained under Approach 2.

Under Approach 1, EPA will take comment on whether it should establish a federal remedy for program-wide failure to assure effectiveness. Preliminarily, EPA believes such a remedy would involve deeming a program "ineffective" such that any limit established under that program would no longer be recognized as limiting a source's PTE. EPA will solicit comment on the appropriate procedures for deeming a State program ineffective from an enforcement standpoint.

V. Transition issues

Description of approach

In the interim, pending action ta adopt Approach 1 or Approach 2 (or some other approach), EPA would plan ta extend the transition period for section 112 and title V, contained in EPA's policy memorandum dated January 25, 1995, for an additional time period that extends from January 1997 ta allow for promulgation of a final PTE rule.

Discussion

EPA recognizes that certain approaches discussed in this paper might establish new requirements or procedures for ensuring the effectiveness of PTE limits. EPA believes that, given the general streamlining nature of the options discussed in this paper, the potential for disruption from the current state of affairs is small. However, approaches set forth in this discussion paper differ from those contemplated in EPA's January 25, 1995, memorandum, "Options for Limiting the Potential to Emit (PTE) of a Stationary Source Under Section 112 and Title V of the Clean Air Act," and other agency guidance on potential to emit. In the PTE rulemaking, EPA plans to request comment on any transitional issues that may be raised by past reliance on guidance contained in the January 25, 1995, memorandum or other guidance that differs substantively from the new direction that EPA will be taking in response to decisions of the D.C. Circuit. EPA will expressly consider whether any temporary measures will be needed to ensure a smooth transition ta the approach finally adopted in the PTE rulemaking.

Another issue related to potential to emit is whether EPA should adopt rulemaking amendments that would provide an exemption for sources with actual emissions significantly less than major source thresholds. In a guidance memorandum dated November 14, 1995 entitled "Calculating Potential ta Emit (PTE) and Other Guidance for Grain Handling Facilities," the EPA included a commitment ta promulgate rulemaking amendments that would extend permanent relief ta low-emitting sources, excluding such sources from being classified as "major sources" for purposes of title V permitting. (The exact cutoff for what constitutes a low-emitting source would be determined in the rulemaking process.) As discussed above, since this November memorandum was issued the EPA has developed an option which would delete the requirement for PTE limits ta be federally enforceable and allow reliance on limits that are State-enforceable. The EPA believes that allowance for use of State-enforceable limits (as well as other streamlining options in this paper) should

significantly reduce the burden ta a source in obtaining a PTE limit, and may provide an effective solution for the issues raised at that time. Accordingly, before proceeding with further rulemaking concerning such an approach, the EPA seeks comment from stakeholders on whether a small source exemption would still be needed if the Agency adopted the options being put forward today.

June 5, 2001

Mr. D. Edward Settle
Manager, Air Quality
ThermoRetec Corporation
1726 Cole Blvd., Bldg. 22, Suite 150
Golden, CO 80401-3213

Dear Mr. Settle:

This is in response to your letter dated February 1, 2001, in which you requested clarification of our guidance for calculating actual or potential emissions of certain regulated pollutants from a new source or modification. Your specific issue was whether the emission rate, in tons per year, should be calculated to represent the "end of pipe" release or a theoretical release rate of a reference compound. You further indicated that the regulated pollutants that you were concerned about included total reduced sulfur compounds, fluorides, volatile organic compounds (VOC), sulfur dioxide, and nitrogen oxides. As further explained below, our general policy for calculating actual or potential emissions from new and modified stationary sources is to follow, to the extent possible, the Environmental Protection Agency (EPA) methods and procedures for developing emission factors/inventories and measuring source compliance.

In a letter dated March 1, 1996, from Robert Kellam, Acting Director, Information Transfer and Program Integration Division, to Donald Gabrielson, which you referenced in your letter, it was stated that "if actual emissions are used as the basis for determining the potential to emit for a source, then these emissions should be measured at the point where the emissions are released." This statement was intended to reflect our position (stated above) that emission calculations should normally be done in a manner compatible with procedures for developing emission factors/inventories and measuring source compliance. This helps to ensure that any emission limitation established for a source for New Source Review (NSR) and title V applicability will be compatible with the formats by which emissions are quantified for inventories and source compliance.

In the case of NO_x emissions, for example, the EPA guidance for developing emission factors and for determining source compliance indicates that NO_x emissions are to be calculated on the basis of the molecular weight of NO_2. Such guidance is contained in the EPA's "Procedures for Preparing Emission Factor Documents," (EPA-454/R-95-015, November 1997) and is consistent with the reference test methods contained in 40 CFR part 60 Appendix A for the measurement of oxides of nitrogen. Each of the relevant test methods (with the exception of Method 7E) directs the user to

measure/calculate the in-stack emissions of NO_x as NO_2.[1]

For the other regulated pollutants that you listed, with the exception of VOC, calculation of the actual or potential emissions for purposes of NSR and title V applicability should follow the EPA principles for developing emission factors, inventories and test methods for the subject pollutant. For VOC emissions, however, it is recognized that the EPA's test methods do not measure the pollutant mass exactly or only measure a subset of the pollutant mass.[2] Nevertheless, for the purposes of both NSR and title V applicability, our policy has been that VOC emissions should be calculated as the total mass of VOCs. That is, a value for each volatile organic compound known to be emitted should be calculated separately and the sum of the individual values should be reported as total VOCs (e.g., 20 tpy of toluene and 26 tpy of methyl ethyl ketone should be calculated separately and then reported as 46 tpy of VOC). This follows our guidance in the document titled "Procedures for Preparing Emission Factor Documents," where we indicate that emission factors for VOCs should be reported "in terms of actual weight of the emitted substance." Those organic substances which are specifically excluded from EPA's definition of VOC at 40 CFR § 51.100(s), because they have "negligible photochemical reactivity," should not be included in the total VOC emission calculation for NSR and title V applicability. The document also provides an exception in the case of unknown species by stating that such emissions should be calculated using an "educated guess" or a molecular weight of 44 (for reporting as propane). Where necessary, this procedure should be used to calculate emissions of those volatile organic compounds that cannot otherwise be quantified.

It is the EPA's intent that a consistent approach be taken, wherever possible, to quantify and report pollutant emissions for its various air programs. Thus, the methods described above for quantifying pollutant emissions would also apply to our procedures for such things as NSR netting, emission trading and offsets, as well as for other SIP-related programs for criteria pollutants. In the case of air quality modeling to predict annual average estimates of ambient NO_2 from point sources, the so-called Ozone Limiting Method does, as you point out, include procedures that can be used to show that not all of the NO_x emissions from a source are converted to NO_2 in the ambient air. Nevertheless, even this method requires the initial assumption that all NO_x in the stack is emitted as NO_2. This in-

---

[1]As you point out, the guidance contained in Chapter A of EPA's Draft NSR Workshop Manual (October 1990) provides that significant emissions of NO_x are "based on the sum of all oxides of nitrogen." (Footnote a, Table A-4, page A.20 of the Manual.) This highlights the fact that not just the NO_2 component of a source's NO_x emissions is to be considered when quantifying total NO_x emissions. Further guidance contained in the EPA reference (in-stack) test methods and EPA guidance for developing emission factors and inventories indicates that the total mass is to be calculated on the basis of the molecular weight of NO_2.

[2]EPA Method 18 has the potential to come the closest to estimating actual mass of all of the organics that are in the gas stream; however, it is not often possible to identify all the species present and to calibrate for each one.

stack amount of NO_2 is the amount that should be reported as the NO_x emissions for a source, regardless of the ultimate NO_x conversion rate determined to be applicable in the area of concern.

With regard to your claim that you have received conflicting information about the appropriate way to calculate actual or potential emissions to determine NSR and title V applicability, we believe it is important that all State and local air agencies quantify and report pollutant emissions in the same way that we do. In previous situations where this issue has arisen, we have provided our position in writing to specific States as appropriate. Moreover, we intend to distribute this letter to all EPA Regional Offices so they can share it with their respective State and local air agencies. In addition, this letter will be posted on our NSR web site so that it will be available for public information.

I appreciate the opportunity to be of service and trust this information is helpful. If you have any questions, please contact Dan deRoeck at (919) 541-5593 or deroeck.dan@epa.gov.

Sincerely,

/s/ signed by Henry Thomas for

John S. Seitz
Director
Office of Air Quality Planning
and Standards

cc: Thirty, → HUBN → DRGAA
Raymond Hedkins

Ohio EPA
Division of Air Pollution Control

inter-office communication

to: (See distribution list.)

from: Eric Foster thru Tom Kalman/Jim Orlemann

subject: Guidance for Calculating PTE from Oil-fired Asphalt Plants

date: June 5, 1996

A question was raised by a local air agency as to how potential to emit ("PTE") should be calculated for hot mix asphalt ("HMA") plants burning oil in drum mix dryers. There are emission factors for these plants in AP-42, Table 11.1-8, but they are based on only two stack tests. Also, there are emission factors for industrial boilers burning oil which could possibly be used (Table 1.3-2). However, it has been determined that these emission factors do not take into account the fact that aggregate in the dryers reduces the SO_2 emissions. Therefore, this guidance will explain how the HMA emission factors from Table 11.1-8 may be modified for use in calculating PTE from HMA plants with drum mix dryers. In addition, some guidance is given for calculating PTE for HMA batching plants.

Question:

What emission factors should be used to calculate the PTE for HMA plants burning oil in drum mix dryers?

Answer:

For SO_2 PTE, the emission factor used will depend on the type of oil burned. If the plant normally uses No. 2 fuel oil, or oil with 0.5% or lower sulfur content, then an emission factor of 0.006 lb/ton of product (0.003 kg/Mg) should be used. However, if the plant normally uses No. 4, 5, or 6 fuel oil, or oil with higher than 0.5% sulfur content, an emission factor of 0.1 lb/ton of product (0.05 kg/Mg) should be used. If waste oil is used, the sulfur content of the oil would need to be determined in order to decide which emission factor to use. These emission factors were derived from the original emission factor of 0.056 lb/ton (0.028 kg/Mg). The two stack tests upon which this factor was based were separated in order to take into account the sulfur content of the oil used at a particular facility, since this has a large impact on SO_2 emissions. [One stack test was performed using No. 2 fuel oil

and gave an average SO_2 emission of 0.006 lb/ton of product. The other test was performed using waste oil (sulfur content of 0.65%) and gave an average SO_2 emission of 0.1 lb/ton of product.]

For CO, CO_2, NO_x, and TOC, the emission factors from Table 11.1-8 should be used, since none of these pollutants are directly dependent on the sulfur content of the oil burned. The stack tests for these factors included dryers that were processing reclaimed asphalt pavement (RAP). Because of limited data, the effect of RAP processing on emissions could not be determined. Also, these factors will give a higher PTE than the factors for industrial boilers in Table 1.3-2.

Question:

What emission factors should be used to calculate the PTE for HMA batching plants burning oil in the dryer?

Answer:

For SO_2, the emission factor (0.24 lb/ton of product) for HMA batching plants in Table 11.1-7 should be used, which is based on a stack test using No. 6 fuel oil. If a facility uses No. 2 fuel oil or oil with less than 0.5% sulfur content, and they disagree with using this emission factor, they could do a stack test. Using the boiler emission factor from Table 1.3-2 would be inaccurate, since it does not account for the effects of aggregate on the SO_2 emissions.

For CO, CO_2, NO_x, and TOC, the emission factors from Table 11.1-7 should be used. These pollutants should not be affected by burning different types of oils, since they are not dependent on the sulfur content in the oil.

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xc: Tom K., Bill, Bruce, Tammy, Tom R., Mike H., Bob, Jeanne, and all ES and AQM&P permit staff

September 6, 1995

MEMORANDUM

SUBJECT: Calculating Potential to Emit (PTE) for Emergency Generators

FROM: John S. Seitz, Director
Office of Air Quality Planning and Standards (MD-10)

TO: Director, Air, Pesticides and Toxics Management Division, Regions I and IV
Director, Air and Waste Management Division, Region II
Director, Air, Radiation and Toxics Division, Region III
Director, Air and Radiation Division, Region V
Director, Air, Pesticides and Toxics Division, Region VI
Director, Air and Toxics Division, Regions VII, VIII, IX, and X

The purpose of this guidance is to address the determination of PTE for emergency electrical generators.

Background

In a memorandum dated January 25, 1995, the Environmental Protection Agency (EPA) addressed a number of issues related to the determination of a source's PTE under section 112 and title V of the Clean Air Act (Act). One of the issues discussed in the memorandum was the term "maximum capacity of a stationary source to emit under its physical and operational design," which is part of the definition of "potential to emit." The memorandum clarified that inherent physical limitations, and operational design features which restrict the potential emissions of individual emission units, can be taken into account. This clarification was intended to address facilities for which the theoretical use of equipment is much higher than could ever actually occur in practice. For such facilities, if their

physical limitations or operational design features are not taken

into account, the potential emissions could be overestimated and consequently the source owner could be subject to the Act requirements affecting major sources. Although such source owners could in most cases readily accept enforceable limitations restricting the operation to its designed level, EPA believes this administrative requirement for such sources to be unnecessary and burdensome.

On the topic of "physical and operational design," the January 25 memorandum provided a general discussion. In addition, EPA committed to providing technical assistance on the type of inherent physical and operational design features that may be considered acceptable in determining the potential to emit for certain individual small source categories. The EPA is currently conducting category-specific analyses in support of this effort, and hopes as a result of these analyses to generate more general guidance on this issue as well.

The purpose of this memorandum is to address the issue of PTE as it relates specifically to emergency generators. There is a significant level of interest in this source category because there are many thousands of locations for which an emergency generator is the only emitting source. Moreover, based on a review of this source category, there exists a readily identifiable constraint on the operational design of emergency generators. Hence, the EPA believes it would be useful to provide today's guidance before the entire effort is complete.

The policies set forth in this memorandum are intended solely as guidance, do not represent final Agency action, and cannot be relied upon to create any rights enforceable by any party.

Guidance for Emergency Generators

For purposes of today's guidance, an "emergency generator" means a generator whose sole function is to provide back-up power when electric power from the local utility is interrupted. The emission source for such generators is typically a gasoline or diesel-fired engine, but can in some cases include a small gas turbine. Emissions consist primarily of carbon monoxide and nitrogen oxides. Other criteria pollutants, and hazardous air pollutants, are also emitted, but at much lower levels. Emissions occur only during emergency situations (i.e., where electric power from the local utility is interrupted), and for a very short time to perform maintenance checks and operator training.

The EPA believes that generators devoted to emergency uses are clearly constrained in their operation, in the sense that, by definition and design, they are used only during periods where electric power from public utilities is unavailable. Two factors indicate that this constraint is in fact "inherent." First, while the combined period for such power outages during any one year will vary somewhat, an upper bound can be estimated which would never be expected to be exceeded absent extraordinary circumstances. Second, the duration of these outages are entirely beyond the control of the source, and when they do occur (except in the case of a major catastrophe) rarely last more than a day.

For emergency generators, EPA has determined that a reasonable and realistic "worst-case" estimate of the number of hours that power would be expected to be unavailable from the local utility may be considered in identifying the "maximum capacity" of such generators for the purpose of estimating their PTE. Consequently, EPA does not recommend the use of 8760 hours per year (i.e., full-year operation) for calculating the PTE for emergency generators. Instead, EPA recommends that the potential to emit be determined based upon an estimate of the maximum amount of hours the generator could operate, taking into account (1) the number of hours power would be expected to be unavailable and (2) the number of hours for maintenance activities.

The EPA believes that 500 hours is an appropriate default assumption for estimating the number of hours that an emergency generator could be expected to operate under worst-case conditions. Alternative estimates can be made on a case-by-case basis where justified by the source owner or permitting authority (for example, if historical data on local power outages indicate that a larger or smaller number would be appropriate). Using the 500 hour default assumption, EPA has performed a number of calculations for some typically-sized emergency generators. These calculations indicate that these generators, in and of themselves, rarely emit at major source levels. (Of course, there may be unusual circumstances where these calculations would not be representative, for example where many generators are present that could operate simultaneously).

Cautions

Today's guidance is only meant to address emergency generators as described. Specifically, the guidance does not address: (1) peaking units at electric utilities; (2) generators at industrial facilities that typically operate at low rates, but are not confined to emergency purposes; and (3) any standby

generator that is used during time periods when power is available from the utility. This guidance is also not intended to discourage permitting authorities from establishing operational limitations in construction permits when such limitations are deemed appropriate or necessary. Additionally, this memorandum is not intended to be used as the basis to rescind any such restrictions already in place.

Distribution/Further Information

The Regional Offices should send this memorandum to States within their jurisdiction. Questions concerning specific issues and cases should be directed to the appropriate Regional Office. Regional Office staff may contact Tim Smith of the Integrated Implementation Group at 919-541-4718. The document is also available on the technology transfer network (TTN) bulletin board, under "Clean Air Act" - "Title V" - "Policy Guidance Memos". (Readers unfamiliar with this bulletin board may obtain access by calling the TTN help line at 919-541-5384).

cc: Air Branch Chief, Region I-X
Regional Air Counsels, Region I-X
Adan Schwartz (2344)
Tim Smith (MD-12)

OhioEPA

Initials

Time

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PTE GUIDANCE

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Table IA							
PROCESSES WITH MAXIMUM TOLUENE EMISSIONS							
* R-5 and R-6B interchangeable; C-4 and C-5 interchangeable							
PRODUCT	A	B	C	D	E	F	G
AER (TPY)	0.11	2.44	0.67	1.35	1.84	0.56	3.92
EQUIPMENT	PERCENT UTILIZATION						
R-1		64.00		23.00			
R-3			44.00				
R-4		74.00					
*R-5	50.00			100.00	100.00		100.00
R-6A							
*R-6B	100.00	100.00					
R-7							
R-8		48.00					
R-12					24.00		
C-2							
*C-4	100.00		15.00	39.00			
*C-5	50.00						
S-1							
S-2							
S-4							
L-1		52.00	100.00		36.00		
D-1			44.00	16.00			
D-2	53.00						
D-4							
D-5							
D-6	50.00					100.00	
IE-1							
IE-2							

TABLE IB				
TOLUENE POTENTIAL TO EMIT (PTE)				
PRODUCT	G	C	F	TOTALS
EMISSIONS (TPY)	7.84	0.67	0.56	9.07
EQUIPMENT	PERCENT UTILIZATION			
R-5	100.00			100.00
R-6B	100.00			100.00
D-6			100.00	100.00
R-3		44.00		44.00
C-4		15.00		15.00
L-1		100.00		100.00
D-1		44.00		44.00

TABLE IIA									
PROCESSES WITH MAXIMUM METHANOL EMISSIONS									
* R-5 and R-6B are interchangeable; C-4 and C-5 are interchangeable									
PRODUCT	E	H	I	J	K	L	M	N	O
AER (TPY)	1	3.22	0.24	1.58	1.86	0.21	0.55	0.53	0.6
EQUIPMENT	PERCENT UTILIZATION								
R-1			57.00		100.00	82.00	43.00		65.00
R-3			100.00						
R-4									
*R-5	100.00	50.00		40.00		100.00			30.00
R-6A								20.00	
*R-6B						44.00			
R-7									
R-8							100.00		100.00
R-12	24.00			42.00		41.00			
C-2				83.00	33.00		71.00		15.00
*C-4		100.00	57.00	42.00					10.00
*C-5				42.00		47.00			
S-1									
S-2									
S-4									
L-1	36.00								
D-1				100.00		35.00	43.00		
D-2									
D-4		50.00							
D-5								72.00	
D-6			79.00		100.00			100.00	100.00
IE-1							67.00		90.00
IE-2									90.00

TABLE IIB				
METHANOL POTENTIAL TO EMIT (PTE)				
PRODUCT	H	K	E	TOTALS
EMISSIONS (TPY)	6.44	1.86	1.0	9.3
EQUIPMENT	PERCENT UTILIZATION			
R-1		100.00		100.00
R-5	100.00			100.00
R-6B			100.00	100.00
R-12			24.00	24.00
C-2		33.00		33.00
C-4	100.00			100.00
C-5	100.00			100.00
D-4	100.00			100.00
D-6		100.00		100.00
L-1			36.00	36.00

TABLE IIIA									
PROCESSES WITH MAXIMUM HEXANE EMISSIONS									
* R-5 and R-6B are interchangeable; C-4 and C-5 are interchangeable.									
PRODUCT	D	I	L	P	Q	R	S	T	U
AER (TPY)	2.13	0.73	1.83	0.59	1.2	1.02	4.05	3	0.33
EQUIPMENT	PERCENT UTILIZATION								
R-1	23.00	57.00	82.00		100.00	92.00	100.00		
R-3		100.00			45.00	92.00	70.00		
R-4				38.00	9.00				
*R-5	100.00		100.00				57.00		
R-6A									
*R-6B			44.00					100.00	
R-7									
R-8					9.00				100.00
R-12			41.00			100.00			
C-2									
*C-4	39.00	57.00		100.00	44.00		100.00	29.00	48.00
*C-5			47.00				14.00		
S-1						92.00			
S-2									
S-4									
L-1						92.00			
D-1	16.00		35.00	100.00			6.00	83.00	
D-2									
D-4									91.00
D-5									
D-6		79.00			12.00				
IE-1									
IE-2									

TABLE IIIB				
HEXANE POTENTIAL TO EMIT				
PRODUCT	S	T	U	TOTALS
EMISSIONS (TPY)	4.05	3.4	0.33	7.8
EQUIPMENT	PERCENT UTILIZATION			
R-1	100.00			100.00
R-3	70.00			70.00
R-5	57.00	13.00		70.00
R-6B		100.00		100.00
R-7				
R-8			100.00	100.00
C-4	100.00			100.00
C-5	14.00	33.00	48.00	95.00
D-1	6.00	94.00		100.00
D-4			91.00	91.00

TABLE IV				
TOTAL HAP POTENTIAL TO EMIT				
PRODUCT	H	G	K	TOTALS
EMISSIONS (TPY)	6.44	3.92	1.86	12.22
EQUIPMENT	PERCENT UTILIZATION			
R-1			100.00	100.00
R-3				
R-4				
R-5	100.00			100.00
R-6A				
R-6B		100.00		100.00
R-7				
R-8				
R-12				
C-2			33.00	33.00
C-4	100.00			100.00
C-5	100.00			100.00
S-1				
S-2				
S-4				
L-1				
D-1				
D-2				
D-4	100.00			100.00
D-5				
D-6			100.00	100.00
IE-1				
IE-2				

Action Memo

SYNTHETIC ORGANIC CHEMICAL MANUFACTURERS ASSOCIATION

March 16, 1995

Potential to Emit Workgroup

FROM: Sherry L. Edwards

SOCMA Guidance on Calculating Potential Emissions

Please find attached for your review and comment the draft SOCMA guidance on calculating potential emissions from a batch process. As we agreed, this guidance will be distributed to the SOCMA membership and submitted to EPA in hopes that the Agency will adopt the recommended methodology as official guidance. I have spoken with EPA staff and told them we would forward the revised information to them shortly.

Please submit your comments to me by no later than Thursday, March 23. You may call me at (202) 414-4170 or fax comments to me at (202) 289-8584. Thank you for your prompt attention to this matter.

Attachment

RECEIVED
MAR 20 1995
W.S. TURETSKY

1100 NEW YORK AVENUE, N.W. • SUITE 1090 • WASHINGTON, DC 20005 • TELEPHONE (202) 414-4100

HOW TO CALCULATE POTENTIAL EMISSIONS FROM A BATCH PROCESS TO DETERMINE MAJOR SOURCE STATUS UNDER THE CLEAN AIR ACT

Graphic

GUIDANCE PREPARED BY THE SYNTHETIC ORGANIC CHEMICAL MANUFACTURERS ASSOCIATION

DRAFT

SOCMA GUIDANCE ON POTENTIAL TO EMIT

HOW TO DETERMINE IF A BATCH PROCESSING FACILITY IS A MAJOR SOURCE

1.0 Introduction

- 1.1 Need for Guidance on PTE
- 1.2 EPA Policy on Inherent Operational Limitations
- 1.3 Intended Use for Guidance

2.0 Five (5) Step SOCMA PTE Emission Estimation Methodology

- 2.1 ACT Derived AERs
- 2.2 Percent Equipment Utilization
- 2.3 Interchangeable Equipment Determinations
- 2.4 Data Tabulation
- 2.5 Selection of PTE

3.0 Model PTE Calculations

Appendices

Appendix A: USEPA Guidance on PTE

Appendix B: Typical Batch Sheet

Appendix C: Batch Percent Utilization/Emission Spreadsheet Form

Appendix D: Batch Potential to Emit Spreadsheet Form

DRAFT

WHO IS THE SYNTHETIC ORGANIC CHEMICAL MANUFACTURERS ASSOCIATION

The Synthetic Organic Chemical Manufacturers Association (SOCMA) is a trade association serving more than 230 companies that have a common interest in the manufacture, distribution and marketing of organic chemical products. The majority of SOCMA's members are small businesses with annual sales under $40 million. SOCMA member companies are representative of a much larger number of organic chemical manufacturers throughout the United States. Most of SOCMA's manufacturing member companies utilize batch processes and many are custom chemical manufacturers who produce specialty chemicals by contracting with larger companies.

Batch processing provides an efficient and frequently the only method to make small quantities of chemicals to meet specific needs and consumer demands for specialized products. Batch processors must be able to respond quickly to new requirements by customers, fill small market niches and develop new products. They are at the cutting edge of new technology, provide products often made nowhere else in the world and help keep imports down by responding quickly to customer demands for service and delivery. This segment of the chemical industry retains a high degree of entrepreneurship and must retain the flexibility to meet ever changing needs and new technological developments.

Batch processes are distinct from continuous operations in that a continuous operation has a constant raw material feed to each unit operation and continual product withdrawal from each unit operation. A batch process has an intermittent introduction of frequently changing raw materials into the process, varying process conditions imposed on the process within the same vessel and, consequently, an intermittent release of air emissions. Vessels are often idle while waiting for raw materials, waiting for quality control checks, undergoing cleaning, etc. Thus the possibility for emissions from a batch process is substantially different from that of a continuously operating process.

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SECTION 1 - INTRODUCTION

SECTION 1.1 - NEED FOR GUIDANCE ON POTENTIAL TO EMIT

There is a great need for guidance on how to calculate potential-to-emit (PTE) for batch processing facilities. Applicability of most of the Clean Air Act's rules are based on a source's "potential to emit."

SOCMA has repeatedly objected to the Environmental Protection Agency's (EPA's) current definition of "potential to emit" because it allows sources to consider only "federally enforceable" controls or other restrictions on emissions when calculating PTE. There is no statutory requirement that controls be federally enforceable; therefore, SOCMA has recommended that the Agency recognize non-federally enforceable controls.

While this is a legal interpretation of significant concern, this guidance focuses on a technical component of the potential to emit issue: a methodology for calculating potential emissions from batch processes, which accounts for inherent limitations on the operation of such processes. Because batch facilities use the same equipment to manufacture a variety of products in a given year, it is physically impossible for these facilities to produce all of these products on a 24 hours a day, seven day a week basis. Therefore, the calculation of potential emissions from these facilities must consider equipment utilization rates for each product/process and their relationship to one another. This requires the consideration of the physical attributes of a process before controls are even considered.

For instance, a company produces products A and B and owns equipment U, W, X, Y and Z to manufacture them. The company utilizes equipment U, W and X to manufacture product A; and X, Y and Z to manufacture product B. Processes to manufacture products A and B both utilize equipment X; therefore, it is impossible for the facility to run both processes at the same time. The calculation of potential emissions must recognize this equipment utilization factor in order to yield an estimate of potential emissions over time which is physically possible at this particular plant.

The effect of emissions controls is not of concern at this point in the calculation of potential emissions. Of course, controls may further limit a source's actual and potential emissions; however, it is important to consider the issues of a source's actual ability to generate air emissions and the reductions achieved by controls separately.

SOCMA is concerned with this issue because many states are requiring batch facilities to calculate their potential emissions using the same methodology as applied to continuous operations, which requires an assumption of a 24 hours a day, seven days a week operation. This methodology greatly inflates estimates of potential emissions

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beyond what is physically possible for batch facilities that use the same equipment to produce a variety of products.

The Agency has released guidance on PTE issues; however, none of the information adequately addresses the specific concerns of batch processors. For example, the Agency touches upon PTE issues in its February 1994 Alternative Control Technology (ACT) document for batch processes; however, calculation procedures are not addressed. SOCMA has developed guidance to provide a more realistic way of calculating potential emissions from a batch process. The following information is being provided to assist you in working with your permitting agencies to calculate potential emissions from your batch facility. The calculation methodology was developed by SOCMA's Air Committee and is not official government guidance. However, SOCMA is urging the Agency to adopt this methodology as official guidance.

SECTION 1.2 - EPA POLICY ON INHERENT OPERATIONAL LIMITATIONS

The Agency has defined PTE similarly in various Clean Air Act rules. For example, in the Part 63 General Provisions, EPA defines PTE as:

> *The maximum capacity of a stationary source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the stationary source to emit a pollutant including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is federally enforceable. (40 CFR Section 63.2)*

However, under EPA policy not all operational limitations have to be federally enforceable. In January 1995 guidance (see Appendix A), the Agency discusses inherent limitations on the potential to emit which may be considered without being federally enforceable:

> *Clearly, there are sources for which inherent physical limitations for the operation restrict the potential emissions of individual emission units. Where such inherent limitations can be documented by a source and confirmed by the permitting agency, EPA believes that States have the authority to make such judgments and factor them into estimates of a stationary source's potential to emit.*

SOCMA applauds the Agency for including this language in the guidance. Equipment availability (or more appropriately unavailability) is certainly an inherent

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physical limitation on a particular operation. The SOCMA methodology provides for documentation of both the products manufactured and the equipment used to manufacture these products. The methodology begins with the largest emitting product/process and methodically rules out other processes that cannot be manufactured at the same time. These physical restraints on the facilities operations are not based on a decision to limit production requiring enforceability. Quite simply, it is physically impossible to operate beyond this worst case scenario given a finite list of products and equipment. The documentation required in SOCMA's methodology is sufficient to demonstrate this.

SECTION 1.3 - INTENDED USE OF GUIDANCE

This guidance was developed to assist companies that must calculate potential emissions to determine major source status under the Clean Air Act. It is not intended as the sole method of calculating potential emissions. There are other methods and scenarios under which a source may need to calculate potential emissions. For instance, a batch facility that is already considered major and required to apply for an operating permit may wish to pursue another methodology that results in the highest PTE conceivable in order to avoid triggering permit modifications when making a change that increases its PTE.

The methodology does have limitations. For instance, the methodology relies on the utilization of existing equipment and a specific product mix. Whenever new products or equipment are brought on-site, the source would have to recalculate PTE based on the changes. SOCMA recognizes that this may be time consuming for those facilities that frequently bring new products on line and, therefore, does not advocate this guidance as the sole methodology for calculating PTE. SOCMA does believe that it provides a useful alternative to the 24 hours a day, seven days a week standard currently mandated by some state permitting authorities.

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SECTION 2 - EMISSION ESTIMATION METHODOLOGIES

In general, SOCMA recommends a five (5) step procedure for calculating potential to emit to determine if a batch processing facility is a major source. Each step is described below.

SECTION 2.1 - CALCULATION OF PRODUCT SPECIFIC ANNUAL EMISSION RATES FOR SPECIFIC EQUIPMENT TRAINS NEEDED TO PRODUCE SPECIFIC PRODUCTS (STEP #1)

The USEPA's 1994 Alternatives Control Technology (ACT) Document contains several equations for calculating emissions for various types of batch operations. In addition, the ACT Document implies that the following methodology should be used for converting these emission calculations to Annual Emission Rates (AER):

Equation 2.1:

$$\text{(AER) Product M Pollutant X} = \frac{\text{ACT Derived Total Emissions Per Batch} \times 8760 \ \frac{\text{Hours}}{\text{Year}}}{\text{(Time in hours required for the piece of equipment in The Batch Train that is used the most)}}$$

Where AER = Annual Emission Rate for Pollutant X for Product M to be produced in a specific batch train. (It should be noted that the above calculation assumes that Product M is the only product produced in the batch train.)

To complete Step 1, calculate the AER values for every pollutant regulated by the Clean Air Act for every batch train needed to produce a specific product.

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SECTION 2.2 - CALCULATION OF EQUIPMENT UTILIZATION PERCENTAGES FOR EACH PIECE OF EQUIPMENT IN THE BATCH TRAIN NEEDED TO PRODUCE A SPECIFIC PRODUCT (STEP #2)

Step 2 of the PTE analysis can be completed by extracting from batch sheets the time needed to run each piece of equipment in every batch train. The following equation should be used to calculate percent utilization (i.e., percentage of time required for every piece of equipment for every product which can be produced in the batch train):

Equation 2.2:

$$\text{Percent Utilization Product M} = 100\% \times \frac{\text{(Time in hours of individual piece of equipment)}}{\text{(Maximum hours for piece of equipment with the largest time)}}$$

A typical batch sheet is provided in Appendix B to illustrate the use of Equation 2.2. Note that the batch train for hypothetical Product H consists of a reactor, a centrifuge, and a dryer. Reaction, centrifugation, and drying times for Product H are 120, 240, and 120 hours, respectively. Therefore, using Equation 2.2, the percent utilization for the reactor is $100\% \times \frac{120}{240}$ or 50%.

Similarly, percent utilizations for the centrifuge and dryer are 100% and 50%, respectively.

SECTION 2.3 - DETERMINATIONS INVOLVING INTERCHANGEABLE EQUIPMENT (STEP #3)

To complete Step 3, identify interchangeable or alternative equipment which can be substituted for equipment normally used to make a particular product by examining batch sheets. Referring to Appendix B, note that reactor R-6B and centrifuge C-4 can be substituted for reactor R-5 and centrifuge C-5.

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SECTION 2.4 - TABULATION OF AER, PERCENT UTILIZATION, AND INTERCHANGEABLE EQUIPMENT DETERMINATIONS (STEP #4)

Step 4 can be completed by recording, in a Batch Percent Utilization/Emission Spreadsheet, the AER values (from Step 1) for each product that emits a regulated pollutant. A blank form is provided in Appendix C. In the same spreadsheet, record percent utilization (Step 2) for each piece of equipment which makes up the batch train for a specific product and also indicate interchangeable equipment (Step 3). It should be noted that separate spreadsheets must be filled out for each hazardous air pollutant (HAP) and for each criteria pollutant. Examples are provided in Section 3 of this manual to help the user complete Step 4 of the procedure.

SECTION 2.5 - SELECTION OF PTE (STEP #5)

SECTION 2.5.1 - PTE FOR A SINGLE PIECE OF BATCH PROCESSING EQUIPMENT

PTE for a batch process which requires only a single piece of equipment (e.g., one reactor) is equal to the worst case Annual Emission Rate (AER) for that piece of equipment. Worst case AER is determined by first computing AER values for every product which can be produced in this piece of equipment and then by selecting the highest AER value. To summarize, PTE for a single piece of equipment is equal to the highest AER value and assumes that the product with the highest AER value will be the only product produced in that piece of equipment.

SECTION 2.5.2 - PTE FOR OTHER BATCH PROCESSING FACILITIES

PTE for batch processing facility with more than one piece of equipment must be determined by completing Step 5 of the SOCMA procedure. To complete Step 5, examine the emissions and percent utilization data for each matrix generated in Step 4 and select maximum emissions for each pollutant by fully utilizing all available equipment which can be used to produce a particular product. Do not exceed 100% utilization for any piece of equipment. The examples in Section 3.0 will teach the user how to fill out a Batch PTE Spreadsheet. Please note that a blank PTE Batch Spreadsheet form is also provided in Appendix D.

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SECTION 3 - MODEL PTE CALCULATIONS

A hypothetical custom chemical batch processing facility has 23 point sources which emit 3 HAPs (toluene, methanol and hexane) and one criteria pollutant (VOCs) during the manufacture of 21 products (identified as letters A through T.) To determine the applicability of Clean Air Act requirements such as Title V permitting, Reasonably Available Control Technology (RACT) standards, and Section 112 (g) for future modifications, this facility must determine its potential to emit and wishes to use the SOCMA recommended calculation procedures.

3.1 Calculation of Toluene PTE

By following the calculation procedures and completing the Batch Percent Utilization Spreadsheet described in Section 2.4 above, we can see that, as indicated in Table 1A, toluene can be emitted from 7 batch reactors, 3 batch dryers, 3 batch centrifuges, and 1 thin film evaporator. Toluene is emitted in the production of 7 different products.

Product G is the largest emitter of toluene and requires batch reactor R-5 for the entire batch time (i.e., 100% utilization). Since reactors R-5 and R-6B are interchangeable, the maximum toluene emissions for process G is two (2) times the toluene emission rate for one train or 2 x 3.92 = 7.84 TPY. By making this worst case selection, we have tied up both reactors R-5 and R-6B 100% of the time. Therefore, no other process can be run or considered that requires these reactors. Consequently, only Processes C and F can be run concurrently with Process G since all other products require reactors R-5 or R-6B. By inspection, there is no equipment conflict between C and F, so they can be operated concurrently 100% of the time. Therefore, their toluene emissions are added to twice G's emissions to calculate a total toluene plant-wide potential to emit of 9.1 ton/year (see Batch PTE Spreadsheet Table 1B which also serves as a final equipment conflict check).

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3.2 Calculation of Methanol PTE

As indicated in Table 2A, methanol can be emitted from 7 reactors, 3 centrifuges, 1 thin film evaporator, 4 dryers, and 2 ion exchange units. Methanol is emitted in the production of 9 different products.

By reviewing that Batch Percent Utilization Spreadsheet, we can see that Product H is the largest emitter of methanol and requires 1 batch reactor (R-5) 50% of the time, 1 dryer (D-4) 50% of the time, and 1 centrifuge (C-4) 100% of the entire batch time. However, reactor R-5 and dryer D-4 can be run 100% of the time if both centrifuges C-4 and C-5 are used. The maximum methanol emissions for Product H would then be two (2) times the methanol emission rate for one train (2 x 3.2 = 6.4 TPY).

By making this worst case assumption, we have tied up reactor R-5, centrifuges C-4 and C-5, and dryer D-4 100% of the time. Therefore, no other process can be run or considered that requires this equipment. Consequently, by inspection of Table 2A, Product J can be eliminated because it uses centrifuges C4 and C5. Process J's use of reactor R-5 would not itself eliminate process J because reactor R-6B is interchangeable. Product L can be eliminated because it uses centrifuge C5. Products I and O can be eliminated because they both require centrifuge C-4.

The highest methanol emitter for remaining processes (Products E, K, M and N) is Process K which requires reactor R-1, centrifuge C-2 and dryer D-6. Including Process K in the PTE calculation eliminates Products M and N which, respectively, utilize reactor R-1 and dryer D-6.

The only remaining methanol emitter is Process E which uses reactor R-5. Since reactor R-6B is available, Process E is included in the total methanol PTE calculations. Therefore, the methanol potential to emit can be calculated by summing emissions from Processes E, H, and K and is equal to 1.0 + 6.4 + 1.9 or 9.3 TPY (Table II-B).

3.3 Calculation of Hexane PTE

As indicated in Table 3A, hexane can be emitted from 8 batch reactors, 2 batch centrifuges, 1 still, 1 thin film evaporator, and 3 dryers. Hexane is emitted in the production of 9 different products.

By reviewing that Batch Percent Utilization Spreadsheet, we can see that Product S is the largest emitter of hexane and requires reactor R-1 and centrifuge C-4 100% of the time. Therefore, no other process can be considered that requires this equipment. Consequently, Products D, I, L, Q, and R can be eliminated because they all use reactor R-1.

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By inspection, we can see that Product T is the next largest emitter of hexane and should be included in the total hexane PTE because it requires reactor R-6B 100% of the time. However, since reactor R-5 can also be used to produce Product T and there is "spare" capacity in both centrifuge C-5 and dryer D-1, an additional 13% of the time T can be run using reactor R-5. This limits out dryer D-1 at 100% of capacity. Therefore, dryer D-1 is at 94% utilization for Product T and centrifuge C-5 is at 33% utilization total (i.e., basic yearly batch x 1.13).

Product P is eliminated because there is 100 % utilization of dryer D-1 in making Products S and T. Since there is capacity in centrifuge C-5 to produce Product U concurrently with Products S and T, its emissions should be counted in the final hexane plant-wide PTE along with emissions from products S and T.

3.4 Calculation of Total HAP PTE

The total HAP PTE should be determined by first identifying the product with the largest (HAP) emission rate. In this case, Product S has the largest (HAP) emission rate (4.05 TPY of hexane) and fully utilizes reactors R-1 and centrifuge C-4. However, the third largest emitter of HAP is Product H which emits 3.2 TPY of methanol and which uses 50% of reactor R-5's, 100% of centrifuge C-4's, and 50% of dryer D-4's capacity. Product H's methanol emissions would be 6.4 TPY if reactor R-5, centrifuges C-4 and C-5, and dryer D-4 are run at 100% capacity. Since Product S's emissions are less than Product H's at full equipment utilization, Product H should be selected and Product S emissions should be eliminated from the worst case PTE calculation. Therefore, reactor R-5 and centrifuges C-4 and C-5, and dryer D-4 are fully utilized. Any product using any one of these pieces of equipment other than reactor R-5 can be eliminated from the total HAP PTE calculation (Products A, C, D, I, J, L, O, P, Q, S, T and U).

The second largest emitter of a HAP is Product G which can utilize reactor R-6B and which emits 3.92 TPY of toluene. Since there are no equipment conflicts, its HAP emissions will be included in the total plant-wide HAP PTE.

Products B (2.44 TPY toluene) and E (1.0 TPY methanol) are eliminated from the total HAP PTE calculation because they use reactors R-5 or R-6B, which are fully utilized to make Products G and H.

The next largest emitter of a HAP is Product K which emits 1.86 TPY of methanol and which fully utilizes reactor R-1 and dryer D-6. Since this equipment is not used to make Products G and H, Product K's emissions should be included in the total worst case HAP PTE calculation.

Products R is eliminated from the total HAP PTE calculation because it uses reactor R-1.

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Product M (10.55 TPY methanol) is eliminated because it uses reactor R-1.

Products F and N are eliminated because they use dryer D-6 which is tied up in the production of Product K.

Therefore, the total HAP PTE is 12.2 TPY and is determined by adding emissions from Products G (3.9 TPY toluene), Product H (6.4 TPY methanol), and Product K (1.86 TPY methanol).

Table IA							
PROCESSES WITH MAXIMUM TOLUENE EMISSIONS							
* R-5 and R-6B interchangeable; C-4 and C-5 interchangeable							
PRODUCT	A	B	C	D	E	F	G
AER (TPY)	0.11	2.44	0.67	1.35	1.84	0.56	3.92
EQUIPMENT	PERCENT UTILIZATION						
R-1		64.00		23.00			
R-3			44.00				
R-4		74.00					
*R-5	50.00			100.00	100.00		100.00
R-6A							
*R-6B	100.00	100.00					
R-7							
R-8		48.00					
R-12					24.00		
C-2							
*C-4	100.00		15.00	39.00			
*C-5	50.00						
S-1							
S-2							
S-4							
L-1		52.00	100.00		36.00		
D-1			44.00	16.00			
D-2	53.00						
D-4							
D-5							
D-6	50.00					100.00	
IE-1							
IE-2							

TABLE IB				
TOLUENE POTENTIAL TO EMIT (PTE)				
PRODUCT	G	C	F	TOTALS
EMISSIONS (TPY)	7.84	0.67	0.56	9.07
EQUIPMENT	PERCENT UTILIZATION			
R-5	100.00			100.00
R-6B	100.00			100.00
D-6			100.00	100.00
R-3		44.00		44.00
C-4		15.00		15.00
L-1		100.00		100.00
D-1		44.00		44.00

TABLE IIA									
PROCESSES WITH MAXIMUM METHANOL EMISSIONS									
* R-5 and R-6B are interchangeable; C-4 and C-5 are interchangeable									
PRODUCT	E	H	I	J	K	L	M	N	O
AER (TPY)	1	3.22	0.24	1.58	1.86	0.21	0.55	0.53	0.6
EQUIPMENT	PERCENT UTILIZATION								
R-1			57.00		100.00	82.00	43.00		65.00
R-3			100.00						
R-4									
*R-5	100.00	50.00		40.00		100.00			30.00
R-6A								20.00	
*R-6B						44.00			
R-7									
R-8							100.00		100.00
R-12	24.00			42.00		41.00			
C-2				83.00	33.00		71.00		15.00
*C-4		100.00	57.00	42.00					10.00
*C-5				42.00		47.00			
S-1									
S-2									
S-4									
L-1	36.00								
D-1				100.00		35.00	43.00		
D-2									
D-4		50.00							
D-5								72.00	
D-6			79.00		100.00			100.00	100.00
IE-1							67.00		90.00
IE-2									90.00

TABLE IIB				
METHANOL POTENTIAL TO EMIT (PTE)				
PRODUCT	H	K	E	TOTALS
EMISSIONS (TPY)	6.44	1.86	1.0	9.3
EQUIPMENT	PERCENT UTILIZATION			
R-1		100.00		100.00
R-5	100.00			100.00
R-6B			100.00	100.00
R-12			24.00	24.00
C-2		33.00		33.00
C-4	100.00			100.00
C-5	100.00			100.00
D-4	100.00			100.00
D-6		100.00		100.00
L-1			36.00	36.00

TABLE IIIA									
PROCESSES WITH MAXIMUM HEXANE EMISSIONS									
* R-5 and R-6B are interchangeable; C-4 and C-5 are interchangeable.									
PRODUCT	D	I	L	P	Q	R	S	T	U
AER (TPY)	2.13	0.73	1.83	0.69	1.2	1.02	4.05	3	0.33
EQUIPMENT	PERCENT UTILIZATION								
R-1	23.00	57.00	82.00		100.00	92.00	100.00		
R-3		100.00			45.00	92.00	70.00		
R-4				38.00	9.00				
*R-5	100.00		100.00				57.00		
R-6A									
*R-6B			44.00					100.00	
R-7									
R-8					9.00				100.00
R-12			41.00			100.00			
C-2									
*C-4	39.00	57.00		100.00	44.00		100.00	29.00	48.00
*C-5			47.00				14.00		
S-1						92.00			
S-2									
S-4									
L-1						92.00			
D-1	16.00		35.00	100.00			6.00	83.00	
D-2									
D-4									91.00
D-5									
D-6		79.00			12.00				
IE-1									
IE-2									

TABLE IIIB				
HEXANE POTENTIAL TO EMIT				
PRODUCT	S	T	U	TOTALS
EMISSIONS (TPY)	4.05	3.4	0.33	7.8
EQUIPMENT	PERCENT UTILIZATION			
R-1	100.00			100.00
R-3	70.00			70.00
R-5	57.00	13.00		70.00
R-6B		100.00		100.00
R-7				
R-8			100.00	100.00
C-4	100.00			100.00
C-5	14.00	33.00	48.00	95.00
D-1	6.00	94.00		100.00
D-4			91.00	91.00

TABLE IV				
TOTAL HAP POTENTIAL TO EMIT				
PRODUCT	H	G	K	TOTALS
EMISSIONS (TPY)	6.44	3.92	1.86	12.22
EQUIPMENT	PERCENT UTILIZATION			
R-1			100.00	100.00
R-3				
R-4				
R-5	100.00			100.00
R-6A				
R-6B		100.00		100.00
R-7				
R-8				
R-12				
C-2			33.00	33.00
C-4	100.00			100.00
C-5	100.00			100.00
S-1				
S-2				
S-4				
L-1				
D-1				
D-2				
D-4	100.00			100.00
D-5				
D-6			100.00	100.00
IE-1				
IE-2				

APPENDIX B

TYPICAL SOCMA BATCH SHEET

Product: Product H dried — Part No: 4008001
From: Material 1 — Part No: 1068500
MW Product: 300.00 — Basis: 1470.0 Kg — Packet Revision Date: 8/19/91
MW RAW: 100 — Yield: 70.00 %

Part No.	Compound	FW	Sp. Gr.	Moles	kg.	kg./ba	Gal/ba	Price $/kg	Unit Cost $/kg	Recovery %	Credit $/kg
1068500	Material 1	100.00	1.835	1.00	1.0000	700.0	113.1	1.858	0.932		
1088400	Acid 2	50.00	1.500		0.4836	338.5	59.6	0.850	0.150		
1025250	Material 3	150.00	3.118		1.3907	973.5	82.5	3.250	2.152		
1133100	Methanol (tank)	32.07	0.791		6.0393	4227.5	1412.0	0.225	0.647		
1023250	Material 4	100.00	0.951		4.8008	3360.5	805.1	5.100	11.859		
1234000	Water	18.02	1.000		2.7844	1949.1	514.9	0.000	0.000		
1088500	Acid 5	50.00	1.158		1.5031	1052.2	239.5	0.163	0.117		
1186800	Base 6	50.00	1.530		0.1021	71.5	12.3	0.340	0.017		
1133100	Methanol (tank)	32.07	0.791		1.8742	1311.9	438.2	0.225	0.201		
1011750	Acetone (tank)	58.08	0.787		1.8742	1311.9	440.4	0.790	0.705		
4008001	Product H dried	300.00		0.70	2.1000	1470.0	3,889.4		18.580		

Container Charge	
Part No:	1900000
	No Package
Cost/Container:	$0.00
Capacity (kg):	1
Unit Cost/ Kg.:	0.000

Part #	Value

BATCH RAWS = $24,372

Manufacturing Cost Consolidation: GHR Rate = 54.00 $/GHr

Step	Intermediate	Equip	Alternate Equip	Cycle Hr.	Equip Factor	GHr GHr/Ba	Unit Cycle Hr/Kg	Unit Cost $/Kg	Stream	Quant. Lit./Ba	Unit Quant. Lit./Kg	Hazard. Cost $/Liter	Unit Cost $/Kg
A	Reaction	R-5	R-6b	120	1.400	168.00	0.082	8.171					
	Centrifugation	C-5	C-4	240	0.300	72.00	0.163	2.845					
	Drying	D-4		120	0.400	48.00	0.082	1.763					
					GHr =	288.00	GHr/Ba						

Batch LOH = $15,552

Overhead ($/Kg)	10.580
Raws ($/Kg)	18.580
Raws recovery credit	
Containers ($/Kg)	0.000
GMC ($/Kg)	27.159

Key Raws = 100.000 %RM's
Real Raws = 18.580 / kg.

APPROVED FOR USE
Date: _____

Accounting — Process Devel.
Production — Gn. Mgr.

Prepared by: _____
Date: _____

S4DBA1.XLS

Product:	Product H	Part No:	5008001		
From:	Product H dried	Part No:	4008001		
	MW Product:	300.00	Basis:	462.7 Kg	Packet Revision Date: 9/18/91
	MW RAW:	300.00	Yield:	89.50 %	

Part No.	Compound	FW	Sp. Gr.	Moles	kg.	kg./ba	Gal/ba	Price $/kg	Unit Cost $/kg	Recovery %	Credit $/kg
4008001	Product H dried	300.00	1.000	1.00	1.0000	1470.0	388.4	27.159	27.296		
5008001	Product H	300.00		1.00	0.8950	1462.7	388.4		27.296		

BATCH RAWS = $39,924

Container Charge	
Type:	1906RTF
	30 gallon Plastic Drum
Cost/Container:	$11.64
Capacity (kg):	50
Unit Cost/ Kg.:	0.233

Manufacturing Cost Consolidation: GHR Rate = 54.00 $/GHr

Step	Intermediate	Equip	Cycle Hr.	Equip Factor	GHr GHr/Ba	Unit Cycle Hr/Kg	Unit Cost $/Kg	Stream	Quant. Lit./Ba	Unit Quant. Lit./Kg	Hazard. Cost $/Liter	Part #	Unit Cost $/Kg	Value
5	Grinding	FG	4	0.200	0.80	0.003	0.030							
	Sifting	FS	24	0.200	4.80	0.016	0.177							
				GHr =	5.60 GHr/Ba				Batch LOH =	1302				

Overhead ($/Kg)	0.207
Raws ($/Kg)	27.296
Raws recovery credit	
Containers ($/Kg)	0.233
GMC ($/Kg)	27.735

Key Raws = 61.048 %RM's
Real Raws = 16.663 / kg.

APPROVED FOR USE
Date: _____

Accounting	Process Devel.
Production	Gn. Mgr.

Prepared by: _____
Date: _____

From: LAURA ANN GIRE ("GIRE.LAURA@EPAMAIL.EPA.GOV")
To: mhopkins@central,
Date: Friday, April 26, 1996 11:30 am
Subject: Letter to WI on using Equivalent Gallons Method to limit PTE & RACT (SMTP Id#: 193)

(AR-18J)

April 25, 1996

Mr. Dale Ziege
Bureau of Air Management
Department of Natural Resources
101 South Webster Street
Box 7921
Madison, Wisconsin 53707

Dear Mr. Ziege:

This letter is in regards to your request for a determination by the United States Environmental Protection (USEPA) on the Wisconsin Department of Natural Resources (WDNR) using #equivalent gallons# as a form of compliance demonstration. Equivalent gallons has been used to limit Potential to Emit (PTE) in New Source Review Construction Permits, Title V Operating Permits, and Federally Enforceable Sate Operating Permits (FESOPS). It also is being used to demonstrate compliance with #Reasonably Available Control Technology (RACT)#.

In our analysis of the rationale and concept behind equivalent gallons, we reviewed Section NR 422.04 of the Wisconsin Administrative Code and found four State Implementation Plan (SIP) approved methods of determining compliance for RACT. Those four methods listed in NR 422.04 do not include equivalent gallons. The WDNR has not demonstrated that the equivalent gallons method is as stringent as the other methods approved into the SIP. Thus, the equivalent gallons approach does not appear to be a recognized method approved into Wisconsin#s SIP for determining compliance with RACT. Similarly, this method cannot be used to determine compliance with your overall Part D SIP program, e.g., your 15 percent plan.

Furthermore, the equivalent gallons approach does not follow the June 13, 1989, memo from John Seitz, entitled #Guidance on Limiting Potential to Emit in New Source Permitting#. This memo states that, #limitations must be stated as conditions that can be enforced independently of one another.# The equivalent gallons method is not

consistent with this policy. Equivalent gallons utilizes a product of multiple parameters to develop a limit. Each of those parameters cannot be enforced independently, since the limitation is based on the product of those parameters and not on each one.

In summary, we find that emission limits calculated through the equivalent gallons method are neither independently enforceable nor shown to be at least as stringent as approved methods in the SIP. Therefore, this method cannot be used to limit PTE emissions in FESOPS, Title V, Prevention of Significant Deterioration, Part D New Source Review, Offset, or Synthetic Minor Permits. We trust the WDNR to take the necessary steps to ensure that equivalent gallons are not used in the future.

If you have any further questions regarding this letter or would like to discuss the matter further, please contact Laura Gire at (312) 886-5031.

Sincerely yours

/s

Robert Miller, Chief
Permits and Grants Section

From: "cschutt@aq.pca.state.mn.us" ("CSCHUTT@AQ.PCA.STATE.MN.US")
To: dsmith@aq.pca.state.mn.us>, "carole.cenci" ...
Date: Tuesday, May 28, 1996 2:50 pm
Subject: RE: Comment Letters To WI for Facility trying Circumvent PSD (SMTP Id#: 445)

Laura:

Thanks for sharing this information with us. However one question remains : how far apart (in time) permit actions need to be so that these are not considered circunvention ? In other words, how much time is acceptable between two permit actions for the same facility which would accomplish the same thing that Aarrowcas
wants to do in one permit action?. The first one would make a source synthetic minor and the second one would authorize an increase of emissions which would otherwise
have triggered PSD if the subject source was not a permitted synthetic minor. What other aspects would you consider to make a determination ? Do you have an opinion or policy on this ?
Would you please forward this message to Dale Ziege, since I do not have his e-mail address ?
Thanks, Carolina

From: laura ann gire
To: mhopkins; trigo; foyj; yanochkd; epa2209; carole.cenci; carolina.schutt
Subject: Comment Letters To WI for Facility trying Circumvent PSD
Date: Thursday, May 09, 1996 11:49AM

Two comment letters were sent to WI. The first one, aarrow.doc, was sent. WI requested us to clarify our comment regarding circumvention, a second letter was sent arrow.doc.

- AARROW.DOC follows

(AR-18J)

April 26, 1996

Dale Ziege
Wisconsin Department of Natural Resources
P.O. Box 7921
101 South Webster Street
Madison, Wisconsin 53707-7921

Dear Mr. Ziege

This letter is in regards to the Wisconsin Department of Natural Resources draft permit (96-SDD-006) to Aarrowcast in Shawano, Wisconsin. The company proposes to increase the facility s iron melting capacity to 9 tons per hour and change associated casting manufacturing equipment. The modifications would increase the facility s Volatile Organic Compound (VOC) emissions 99.15 tons per year (TPY). The company proposes to first voluntarily limit the present potential to emit (PTE) of the existing facility to under the Prevention of Significant Deterioration (PSD) threshold level, making it a synthetic minor source.

Aarrowcast s existing facility is currently considered a PSD major source for
VOC under the PSD rules found at 40 Code of Federal Regulations
Part 52.21(b)(1)(I). Aarrowcast is a Iron and Steel Mill , which is one of the 28 source categories that have a PSD major source threshold of 100 TPY. The significant PSD emission de-minimis rate for a major modification for VOC s is 40 TPY.

Under the PSD regulations, a major source may take a limit on its PTE in order
to become a synthetic minor source. Additionally, the source may also be modified during the same time period. However, the combination of restricting
a facility s existing PTE to below major source thresholds while making a modification to that same source which both exceeds the significant emission de-minimis rate for a major modification and results in the source again becoming a PSD major source, is considered a circumvention of the PSD regulations. This appears to be the case for Aarrowcast. Thus, the permit as
drafted does not currently meet the requirements of the Clean Air Act.

If you have any further questions or comments, please contact
Constantine Blathras at (312) 886-0671.

Sincerely yours

/s/

Robert Miller, Chief
Permits and Grants Section

cc Steve Dunn
Wisconsin Department of Natural Resources

Gary Schuettpelz
Environmental Services
Menominee Indian Tribe of Wisconsin

standard bcc's: official file
copy w/attachment(s)
originator's file copy w/attachment(s)
originating organization reading file w/attachment(s)

other bcc's: S. Rothblatt (via WPO)
C. Newton (via WPO)
R. Van Mersbergen (via WPO)
P. Spyropoulos (via WPO)

ARD:APB:PGS:C.Blathras:cdb:4/25/96 FILE: C:\SERVER\AARROW.WIS

ARROW.DOC follows

(AR-18J)

May 7, 1996

Mr. Dale Ziege
Bureau of Air Management
Department of Natural Resources
101 South Webster Street
Box 7921
Madison, Wisconsin 53707

Re: Aarrowcast
Permit No. 96-SDD-006

Dear Mr. Ziege:

This letter is in response to the Wisconsin Department of Natural Resources (WDNR) request for the United States Environmental Protection Agency (USEPA) to clarify its comment concerning Aarrowcast. On April 26, 1996, USEPA sent a comment letter to WDNR which suggested that the proposed permit may result in a circumvention of the Prevention of Significant Deterioration (PSD) rules. The WDNR asked USEPA to provide further clarification of why USEPA believes that this could be a circumvention.

Aarrowcast received a construction permit, #94-CHB-423, a year ago for a minor modification that made the entire facility a major source for PSD purposes for Volatile Organic Compounds (VOC), i.e., the sum of all VOCs allowable emissions >100 tons per year (tpy). Thus, any further significant modification to this facility would require the new modification to go through PSD review. At this time, Aarrowcast has requested WDNR to place a synthetic minor limitation on the entire existing facility, such that the emissions of VOCs would be limited to 99 tpy. In

addition to the 99 tpy limit on the existing facility, the source wants to add a new modification and requested that the new modification be limited to an additional 99 tpy of VOCs.

A source is allowed to take a restriction on its potential to emit in order to become a synthetic minor (<100 tpy) if it can show that the last 2 years of actual emissions have been less than 100 tpy. However, if the sole purpose of the facility-wide restriction is to avoid an applicable requirement, such as PSD review, then USEPA considers this to be circumvention.

It appears that Aarrowcast requested a synthetic minor emission limitation to become a minor source in order to avoid having its new significant modification of 99 tpy go through PSD review. Thus, it appears that Aarrowcast is trying to circumvent the PSD requirements. The USEPA trusts that WDNR will make the necessary changes to this permit and re-notice it as a PSD permit.

If you have any further questions regarding this letter or would like to discuss the matter further, please contact Laura Gire at (312) 886-5031 or Constantine Blathras at (312) 886-0671.

Sincerely yours

/s

Robert Miller, Chief
Permits and Grants Section

standard bcc s: official file copy w/attachment (s)
originator s file copy w/attachment (s)
originating organization reading file w/attachment (s)

other bcc s Permits and Grants Chiefs via WPO
Ron Van Mersbergen via WPO
Constantine Blathras via WPO
Beth Valenziano via WPO
Branch Reading File
Steve Dodge via WPO

ARD:APB:PGS:GIRE:LAG:5/6/96 DISKETTE/FILE: GIRE/arrow.wpd

bcc: Mr. Gary Schuettpelz
Menominee Indian Tribe
Of Wisconsin

January 22, 1996

MEMORANDUM

SUBJECT: Release of Interim Policy on Federal Enforceability of Limitations on Potential to Emit

FROM: John S. Seitz, Director
Office of Air Quality Planning and Standards (MD-10)
Office of Air and Radiation

Robert I. Van Heuvelen, Director
Office of Regulatory Enforcement (2241A)
Office of Enforcement and Compliance Assurance

TO: Regional Office Addressees (see below):

The purpose of this memorandum is to notify you that the Agency is today releasing detailed guidance (referred to below as the "Interim Policy") clarifying the immediate impacts of two recent decisions by the U.S. Court of Appeals for the D.C. Circuit regarding EPA regulations requiring federal enforceability of limitations on a source's potential to emit ("PTE") under certain CAA programs. This cover memorandum briefly summarizes the court decisions, and briefly summarizes the immediate impacts of the decisions on current regulations. A more detailed discussion of the impacts of the two court decisions is attached. The policy will remain in place until January 1997, but may be extended if necessary to coincide with the promulgation of revised regulations.

The Court Decisions

In National Mining Association v. EPA, 59 F.3d 1351 (D.C. Cir. 1995), the court addressed hazardous air pollutant programs under section 112. The court found that EPA had not adequately explained why only federally enforceable measures should be considered as limits on a source's potential to emit. Accordingly, the court remanded the section 112 General Provisions regulation to EPA for further proceedings. EPA must either provide a better explanation as to why federal enforceability promotes the effectiveness of state controls, or remove the exclusive federal enforceability requirement. The court did not vacate the section 112 regulations, that is, the

court did not declare the regulations null and void. The regulations remain in effect pending completion of new rulemaking.

In Chemical Manufacturers Ass'n v. EPA, No. 89-1514 (D.C. Cir. Sept. 15, 1995), the court, in light of National Mining, remanded the PTE definition in the PSD and NSR regulations to EPA. The court also vacated the federal enforceability requirement of the PTE definitions in the PSD and NSR regulations.

Summary of Immediate Impacts of the Court Decisions

EPA plans to propose rulemaking amendments in spring 1996 that would address the federal enforceability issue as it relates to section 112, title V, and Prevention of Significant Deterioration & New Source Review ("PSD/NSR") regulations. Pending this rulemaking, the immediate impacts are as follows:

Effects on Section 112. Because the court did not vacate the rule, the current part 63 regulations, requiring federal enforceability, remain in effect.

Effects on title V. Although neither court case addressed the title V regulations, industry challenges to the part 70 requirements are pending. Because the federal enforceability provision of the title V regulations are closely related to the regulations addressed in the two decided cases, EPA will ask the court to leave part 70 in place as the rulemaking amendments are being developed.

Effects on PSD/NSR. Because the court vacated the rules, the requirements in the nationwide rules for PSD and major source NSR concerning federal enforceability are not in effect. In many cases, however, individual State rules implementing these programs have been individually approved in the State Implementation Plan (SIP). The court did not vacate any requirements for federal enforceability in these individual State rules, and these requirements remain in place. As discussed in detail in the Interim Policy, the immediate practical impacts on the PSD/NSR programs are not substantial for newly constructed major sources. Greater impacts may exist for existing major sources seeking to avoid review by demonstrating a net emissions decrease.

Effects on January 25, 1995 Transition Policy. The transition policy remains in effect with one change. For sources emitting more than 50% of the major source threshold, and holding

State-enforceable limits, EPA is no longer requiring that the source submit a certification to EPA.

Distribution/Further Information

The Regional Offices should send this memorandum to States within their jurisdiction. Questions concerning specific issues and cases should be directed to the appropriate Regional Office. Regional Office staff may contact Tim Smith of the Integrated Implementation Group at 919-541-4718, Adan Schwartz of the Office of General Counsel at 202-260-7632, or Julie Domike of the Office of Enforcement and Compliance Assurance at 202-564-6577. The document is also available on the technology transfer network (TTN) bulletin board, under "Clean Air Act, Title V, Policy Guidance Memos." (Readers unfamiliar with this bulletin board may obtain access by calling the TTN help line at 919-541-5384).

Attachment

Addressees:

Director, Office of Ecosystem Protection, Region I
Director, Air and Waste Management Division, Region II
Director, Air, Radiation, and Toxics Division, Region III
Director, Air, Pesticides, and Toxics Management Division, Region IV
Director, Air and Radiation Division, Region V
Director, Multimedia Planning and Permitting Division, Region VI
Director, Air, RCRA, and TSCA Division, Region VII
Assistant Regional Administrator, Office of Pollution Prevention, State and Tribal Assistance, Region VIII
Director, Air and Toxics Division, Region IX
Director, Office of Air, Region X

Regional Counsels, Regions I-X

Director, Office of Environmental Stewardship, Region I
Director, Division of Enforcement and Compliance Assurance, Region II
Director, Enforcement Coordination Office, Region III
Director, Compliance Assurance and Enforcement Division, Region VI
Director, Enforcement Coordination Office, Region VII
Assistant Regional Administrator, Office of Enforcement, Compliance and Environmental Justice, Region VIII
Enforcement Coordinator, Office of Regional Enforcement Coordination, Region IX

EPA INTERIM POLICY ON FEDERAL ENFORCEABILITY REQUIREMENT FOR LIMITATIONS ON POTENTIAL TO EMIT
January 1996

This document provides guidance clarifying the immediate impacts of recent court decisions related to federal enforceability of limitations on a source's potential to emit ("PTE"). In brief, most current regulatory requirements and policies regarding PTE, including the interim policy recognizing state-enforceable limits under section 112 and Title V in some circumstances, remain in effect while EPA conducts expedited rulemaking to address these issues in detail. However, at present, certain netting transactions involving PTE limits under new source review programs may now take place without federal enforceability. Today's guidance will be superseded upon completion of the new rulemaking.

Background

Several important Clean Air Act programs apply to only major sources, i.e., those that "emit or have the potential to emit" amounts exceeding major source thresholds listed in the Act. The EPA has promulgated regulations defining the term "potential to emit" for most of these programs. In particular, five sets of regulations are in place implementing the major source prevention of significant deterioration (PSD) and nonattainment area new source review (NSR) permitting programs (40 CFR 51.166, 40 CFR 52.21, 40 CFR 51.165, Appendix S of 40 CFR Part 51, and 40 CFR 52.24). Regulations governing approvability of state operating permit programs under Title V of the CAA are contained in 40 CFR Part 70, and EPA has proposed regulations implementing a federal operating permits program that are to be promulgated at 40 CFR Part 71. Regulations implementing the requirements of section 112 of the Act related to major sources of hazardous air pollutants are contained in 40 CFR Part 63, subpart A.

For each of the above Clean Air Act programs, the EPA regulations provide that "controls" (i.e., both pollution control equipment and operational restrictions) that limit a source's maximum capacity to emit a pollutant may be considered in determining its potential to emit. Historically, large numbers of new or modified sources that otherwise would be subject to PSD and NSR permitting requirements have limited their PTE in order to obtain "synthetic minor" status and thereby avoid major source requirements. With the advent of operating permit programs under Title V and the MACT program under section 112, many sources that otherwise would be subject to these new requirements under the Clean Air Act Amendments of 1990 also have obtained, or plan to obtain, PTE limits to avoid coverage. For each of these

programs, EPA regulations have required that PTE limits be "federally enforceable" in order to be considered in determining PTE.

These federal enforceability requirements were the subject of two recent decisions of the D.C. Circuit Court of Appeals. The first decision, National Mining Association v. EPA, 59 F.3d 1351 (D.C. Cir. July 21, 1995), dealt with the potential to emit definition under the hazardous air pollutant programs promulgated pursuant to CAA section 112. In this decision, the Court implicitly accepted EPA's argument that only "effective" state-issued controls should be cognizable in limiting potential to emit. In addition, the court did not question the validity of current federally enforceable mechanisms in limiting PTE. However, the court found that EPA had not adequately explained why only federally enforceable measures should be considered in assessing the effectiveness of state-issued controls. Accordingly, the Court remanded the section 112 General Provisions regulation to EPA for further proceedings. Thus, EPA must either provide a better explanation as to why federal enforceability promotes the effectiveness of state controls, or remove the exclusive federal enforceability requirement. The court did not vacate the section 112 regulations, and they remain in effect pending completion of EPA rulemaking proceedings in response to the court's remand.

The second decision, Chemical Manufacturers Ass'n v. EPA, No. 89-1514 (D.C. Cir. Sept. 15, 1995), dealt with the potential to emit definition in the PSD and NSR programs. Specifically, this case challenged the June 1989 rulemaking in which the EPA reaffirmed the requirement for federal enforceability of PTE limits taken to avoid major source permitting requirements in these programs. In a briefly worded judgment, the court, in light of National Mining, remanded the PSD and NSR regulations to EPA. In addition, in contrast to its disposition of the section 112 regulations in National Mining, the court in Chemical Manufacturers vacated the federal enforceability requirement of the PTE definitions in the PSD and NSR regulations.

In a third set of cases, industry challenges to the federal enforceability requirements in Part 70 are pending before the D.C. Circuit. The Title V cases have not been briefed. However, since the federal enforceability provisions of these Title V regulations are closely related to the regulations addressed in the two decided cases, EPA plans to ask the court to remand the regulations to EPA for further rulemaking, and to leave Part 70 in place during the new rulemaking.

Plans for Rulemaking Amendments

EPA plans to hold discussions with stakeholders and propose rulemaking amendments by spring 1996, and to issue final rules by spring 1997, that would address the court decisions impacting regulations promulgated pursuant to section 112 and the PSD/NSR regulations. At the same time, EPA will propose a parallel approach to cognizable PTE limits for major sources subject to title V. EPA currently plans to address the following options, after discussions with stakeholders:

(a) An approach that would recognize "effective" State-enforceable limits as an alternative to federally enforceable limits on a source's potential to emit. Under this option, a source whose maximum capacity to emit without pollution controls or operational limitations exceeds relevant major source thresholds may take a State or local limit on its potential to emit. In such circumstances, the source must be able to demonstrate that the State-enforceable limits are (1) enforceable as a practical matter, and (2) being regularly complied with by the facility.

(b) An approach under which the EPA would continue to require federal enforceability of limits on a source's potential to emit. Under this approach, in response to specific issues raised by the court in National Mining, EPA would present further explanation regarding why the federal enforceability requirement promotes effective controls. Under this approach, EPA would propose simplifying changes to the administrative provisions of the current federal enforceability regulations.

The remainder of this guidance memorandum addresses the immediate impacts of the court decisions on each of the three programs, in light of the upcoming rulemaking.

Effects on PSD/NSR

EPA interprets the court's decision to vacate the PSD/NSR federal enforceability requirement in the Chemical Manufacturers case as causing an immediate change in how EPA regulations should be read, although EPA expects that the effect of this change will be limited. Specifically, provisions of the definitions of "potential to emit" and related definitions requiring that physical or operational changes or limitations be "federally enforceable" to be taken into account in determining PSD/NSR applicability, the term "federally enforceable" should now be read to mean "federally enforceable **or legally and practicably**

enforceable by a state or local air pollution control agency."[1] For the reasons discussed below, however, the practical effects of the vacatur will be limited during the period prior to completion of new EPA rulemaking on this issue. During this interim period, federal enforceability is still required to create "synthetic minor" new and modified sources in most circumstances pending completion of EPA's rulemaking.

First, EPA interprets the order vacating certain provisions of EPA regulations as not affecting the provisions of any current SIP, or of any permit issued under any current SIP. Thus, previously issued federally enforceable permits, such as permits issued under federally enforceable state operating permit programs under Title I ("FESOPPs") remain in effect. Likewise, EPA-approved state PSD and NSR SIP rules requiring that all pollution controls or operational restrictions limiting potential to emit be federally enforceable remain in place, even though

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[1]Both National Mining and Chemical Manufacturers directly addressed only the definition of potential to emit, and not related definitions that also employ the federal enforceability requirement, in particular, those related to netting. (See, e.g., 40 CFR § 52.21(b)(3)(vi)(b) providing that an emissions decrease is creditable only if it is "federally enforceable.") The court's concerns regarding the adequacy of EPA's rationale, however, appear to extend to these netting provisions; consequently, EPA interprets the vacatur as extending to them as well. Conversely, EPA reads the vacatur as not extending to aspects of the PTE definition other than the federal enforceability provision. Such other aspects (e.g., determining a source's "maximum capacity" to emit in the absence of controls) were not at issue in the litigation and not addressed by the court decisions. In addition, EPA interprets Chemical Manufacturers as not addressing the regulatory requirements for federal enforceability of offsets used to comply with NSR requirements. CAA § 173(a) expressly requires that any emissions reductions required as a precondition to the issuance of a nonattainment NSR permit to be "federally enforceable" before the permit may be issued. This requirement is not affected by the court decisions.

such provisions may have been based on the now-vacated terms of EPA regulations.[2]

Second, a new or modified source that seeks to lawfully avoid compliance with the "major" source requirements of either PSD or nonattainment NSR by limiting its potential to emit to achieve synthetic minor status must still obtain a general or "minor" NSR preconstruction permit under section 110(a)(2)(C) of the Act and 40 C.F.R. § 51.160-164. Every SIP contains a minor NSR program that applies generally to new or modified sources of air pollutants, without regard to whether those sources are "major." Permits under such programs are, like all other SIP measures, federally enforceable. See CAA section 113(b)(1); 40 CFR § 52.23.[3] The requirement under section 110(a)(2)(C) to

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[2]The situation is somewhat different in the several states lacking approved PSD programs, which are governed instead by the federal PSD program at 40 CFR § 52.21. (In most instances, these states have been delegated authority to issue PSD permits under the federal program pursuant to § 52.21(u).) Since these states do not have an EPA-approved PSD program, their SIPs presumably also lack state rules containing a blanket requirement that new or modified sources use only federally enforceable limits on PTE when seeking synthetic minor status to avoid PSD. Rather, sources in these states have been subject to the federal enforceability requirements of § 52.21. As noted above, Chemical Manufacturers vacated the requirements in § 52.21 that physical or operational changes be "federally enforceable" to be taken into account in determining the applicability of PSD to a proposed new source or modification. Accordingly, in states governed by § 52.21, a limit that is either "federally enforceable or legally and practicably enforceable by a state or local air pollution control agency" may now be used in determining PSD applicability in some circumstances. The effect of the vacatur in these states is limited, however, because as discussed below, new and modified sources in these states are still subject to the requirement to obtain federally enforceable minor source permits.

[3]Consider, for example, an existing source in a moderate ozone nonattainment area that plans to add a new emissions unit that would have the potential to emit 100 tons per year ("TPY") of VOC if uncontrolled, and would therefore be considered a major modification subject to major NSR requirements, including a requirement to install pollution controls representing LAER that would reduce emissions in this instance by 90%. The source may instead seek to avoid major NSR by installing cheaper controls

obtain a federally enforceable minor NSR permit was not at issue in the Chemical Manufacturers case, and is unaffected by the court's ruling.

As noted above, the court's action does not affect FESOPPs that many states have adopted as an additional mechanism for avoiding PSD/NSR or for creating an emissions reduction credit that may be tradeable to another source. Permits issued under such programs continue to be valid for purposes of limiting PTE. States are free to submit SIP revisions to remove such provisions in light of the vacatur, and to substitute mechanisms that are legally and practicably enforceable by the state for limiting potential to emit in some circumstances under the PSD/NSR program. However, we expect few states to do so pending the outcome of new EPA rulemaking on the broader federal enforceability issue.

Likewise, states conceivably might now seek to reduce the scope of SIP-approved minor NSR programs where they are presently broader than minimum federal requirements (e.g., to no longer cover changes at existing emissions units that reduce emissions to create a netting credit or tradeable emission reduction credit), and to substitute state-enforceable mechanisms. Here also, however, EPA does not expect states to seek such changes pending the outcome of EPA rulemaking. In addition, regarding the minimum scope of minor NSR programs, section 110(a)(2)(C) provides that state minor NSR programs must regulate all new or modified sources "as necessary" to insure consistency with air quality planning goals. Given the central role of new and modified synthetic minor sources in the overall PSD/NSR regulatory scheme, and the adverse environmental consequences if controls were not effective in limiting PTE, it is unlikely that states would have the legal ability to exclude from such programs transactions that are intrinsic to the avoidance of major NSR permitting requirements.

The principal immediate impact of the vacatur of the PSD/NSR federal enforceability regulations likely will occur in cases involving "netting" exercises at existing sources, where a source seeks to internally offset an emissions increase at a new or modified emissions unit by installing pollution controls or accepting operational limitations at another unit within the

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that reduce emissions by 61% and thereby limit the emissions increase to 39 TPY -- just below the "major" modification threshold. Such a source would still need to obtain a minor NSR permit to construct the new unit, and that permit would be federally enforceable.

plant. For the reasons discussed above, in such cases the new or modified unit would still need to obtain a federally enforceable minor NSR permit. In contrast, the vacatur ordered by the court may allow the unit that is limiting its emissions to rely in some circumstances on controls that are legally and practicably enforceable by the state.[4] Note, however, that under the terms of many state minor NSR programs, the unit undergoing an emissions reduction would still need to be included in the minor NSR permit. Also, if the state's SIP has a general requirement that PTE limits be federally enforceable, the unit reducing emissions would still need a federally enforceable limit. Such programs would not be affected by the court's ruling. In sum, the precise impact of the vacatur on PSD/NSR applicability in any state can be definitively established only by reviewing the provisions of a particular SIP.

Effects on Section 112 and Title V

The National Mining decision did not vacate the current definition of a major source under section 112 program in the General Provisions to Part 63, and neither of the court decisions addressed the definition of a major source for the title V program in 40 CFR part 70. Both of these current definitions, therefore, remain in effect. As discussed above, however, these regulations will be affected by the rulemaking EPA is conducting in response to the court decisions.

EPA today reiterates that independent from the decision in National Mining, current EPA policy already recognizes State-enforceable PTE limits under section 112 and Title V in many circumstances under a transition policy intended to provide for orderly implementation of these new programs under the Clean Air

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[4]Consider, for example, an existing source like the one addressed above in Footnote 3, that also plans to install a new unit that would have the potential to emit 100 tons per year of VOC per year if uncontrolled. In contrast to the earlier example, however, this source plans to avoid major NSR not by controlling the new unit, but instead by installing controls at another emissions unit at the plant whose baseline emissions are 100 TPY that will reduce actual emissions by 61 TPY. The overall result of this netting transaction is the same as in the earlier example: a net emissions increase of 39 TPY at the plant. The new unit would still need to obtain a minor NSR permit, and that permit would still be federally enforceable. In light of the vacatur in Chemical Manufacturers, however, the existing unit that is adding controls now may be able to limit its PTE using a state-enforceable permit.

Act Amendments of 1990. This policy is set forth in a memorandum, "Options for Limiting the Potential to Emit (PTE) of a Stationary Source Under Section 112 and Title V of the Clean Air Act" (January 25, 1995). The transition policy is summarized below; as noted, EPA is now making one significant change in that policy in light of National Mining.

In recognition of the absence in some states of suitable federally enforceable mechanisms to limit PTE applicable to sources that might otherwise be subject to section 112 or Title V, EPA's policy provides for the consideration of State-enforceable limits as a gap-filling measure during a transition period that extends until January 1997.[5] Under this policy, for the 2-year transition period, restrictions contained in State permits issued to sources that actually emit more than 50 percent, but less than 100 percent, of a relevant major source threshold are treated by EPA as acceptable limits on potential to emit, provided: (a) the permit and the restriction in particular are enforceable as a practical matter; (b) the source owner submits a written certification to EPA accepting EPA and citizen enforcement. In light of National Mining, EPA believes that the certification requirement is no longer appropriate as part of this policy. Accordingly, **EPA hereby amends the January 1995 transition policy by deleting the certification requirement**.

In addition, under the transition policy, sources with consistently low levels of actual emissions relative to major source thresholds can avoid major source requirements even absent any permit or other enforceable limit on PTE. Specifically, the policy provides that sources which maintain their emissions at levels that do not exceed 50 percent of any applicable major source threshold are not treated as major sources and do not need a permit to limit PTE, so long as they maintain adequate records to demonstrate that the 50 percent level is not exceeded.

Under the terms of EPA's transition policy, the transition period is to end in January 1997. In addition, completion of EPA's rulemaking in response to the recent court decisions, which EPA anticipates will occur by early 1997, may render the transition policy unnecessary after that time. However, in conjunction with the rulemaking, EPA will consider whether it is appropriate to extend the transition period beyond January 1997.

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[5]Since PSD and nonattainment NSR are mature programs, minor NSR permits to limit PTE were available in all states well prior to enactment of the Clean Air Act Amendments of 1990. Hence, EPA's transition policy does not extend to those programs.

Per Mike Hopkins Phone Conversation 4/25/95

Restricting Potential to emit

If the potential emissions of an emission unit are over major source threshold, i.e. 40 ton NSR or 100 ton Title V, etc. one of the following federally enforceable permit restrictions will be needed to avoid future Title V permitting:

limit on gallons coating applied/month
or
12 month rolling average gallon limit
or
365 day rolling average gallon limit

In conjunction with one of these need lbs VOC/gallon limit.

For rolling restrictions, USEPA prefers 365 day but they will accept 12 month rolling.

The above is used to calculate and restrict PTE.

The above example is for VOC type sources. Other restrictions can be used for other types of sources but, generally, USEPA requires a process variable to be monitored (that can be related to emissions) - not emissions.

USEPA also wants short term limits on emission unit. They want lbs/hr limit. Modeling and Planning recommends figuring worst case lbs/hr emission rate (this can be pretty high number) and include that in permit. This number is needed in order to conduct Air toxic modeling anyway, include lb/hr emission rate.

Reporting requirements

Based on E.G. by Orlemann (see EG #43) as a rule of thumb.

If source above 25 tons uncontrolled potential (see EG #43) need terms and conditions which require quarterly reports.

If less than 25 tons uncontrolled potential maybe only need annual report, up to county engineer. If less than 25 tons/yr uncontrolled potential EG #43 says field office staff can decide if terms are needed. This decision should be based on the likelihood of compliance. IE. if the source is close to noncompliance, then recordkeeping and reporting are appropriate. If it is obvious that the source cannot operate out of compliance, then recordkeeping and reporting is not necessary.

If 5 to 15 tons, no report just keep records. None of this is in stone. In general if we feel company can comply CO will likely buy off on it. However, if they believe more stringent reporting necessary they can at any time overrule this and require more stringent reporting.

If want permit federally enforceable USEPA wants quarterly reporting, so company can not go a entire year in violation. This is also the main reason USEPA does not accept annual limits (ton/year limit) to restrict potential to emit. With a ton/year limit it is likely that over a year will go by before we would discover the violation (after the annual report was submitted).

Don't forget to look closely at USEPA's PTE guidance.

Sy

NOTE TO: SEE BELOW

SUBJECT: January 25, 1995 Memorandum Regarding Potential to Emit

Recently, you received a memorandum entitled, "Options for Limiting the Potential to Emit (PTE) of a Stationary Source Under Section 112 and Title V of the Clean Air Act (Act)" dated January 25, 1995. Subsequently, it has come to our attention that there were two errors on page 9 of this memorandum as follows:

(1) In the sentence beginning "For this 2-year period such sources...," insert the words "(i.e., those emitting under the 50 percent threshold)"

(2) In the sentence beginning "To qualify...," insert the words "transition period" after the word "entire" and delete the phrase "as major sources and would not be required to obtain a permit that limits their potential to emit that would be considered to be adequate during this transition period."

Please include the corrected page 9 when distributing this memorandum.

If you have any questions or need further assistance, please contact Timothy Smith of my staff at 919-541-4718.

Robert G. Kellam
Acting Director
Information Transfer and
Planning Integration
Division

Attachment

Addressees:
Air Division Director, Regions I-X

delays in State adoption or EPA approval of programs or in their implementation. In order to ensure that such gaps do not create adverse consequences for States or for sources, EPA is announcing a transition policy for a period up to two years from the date of this memorandum. The EPA intends to make this transition policy available at the discretion of the State or local agency to the extent there are sources which the State believes can benefit from such a transition policy. The transition period will extend from now until the gaps in program implementation are filled, but no later than January 1997. Today's guidance, which EPA intends to codify through a notice and comment rulemaking, provides States discretion to use the following options for satisfying potential to emit requirements during this transition period.

1. Sources maintaining emissions below 50 percent of all applicable major source requirements. For sources that typically and consistently maintain emissions significantly below major source levels, relatively few benefits would be gained by making such sources subject to major source requirements under the Act. For this reason, many States are developing exclusionary rules and general permits to create simple, streamlined means to ensure that these sources are not considered major sources. To ease the burden on States' implementation of title V, and to ensure that delays in EPA's approval of these types of programs will not cause an administrative burden on the States, EPA is providing a 2-year transition period for sources that maintain their actual emissions, for every consecutive 12-month period (beginning with the 12 months immediately preceding the date of this memorandum), at levels that do not exceed 50 percent of any and all of the major stationary source thresholds applicable to that source. A source that exceeds the 50 percent threshold, without complying with major source requirements of the Act (or without otherwise limiting its potential to emit), could be subject to enforcement. For this 2-year period, such sources (i.e., those emitting under the 50 percent threshold) would not be treated as major sources and would not be required to obtain a permit that limits their potential to emit. To qualify under this transition policy, sources must maintain adequate records on site to demonstrate that emissions are maintained below these thresholds for the entire transition period. Consistent with the California approach, EPA believes it is appropriate for the amount of recordkeeping to vary according to the level of emissions (see paragraphs 1.2 and 4.2 of the attached rule).

2. Larger sources with State limits. For the 2-year transition period, restrictions contained in State permits issued to sources above the 50 percent threshold would be treated by EPA as acceptable limits on potential to emit, provided: (a) the permit is enforceable as a practical matter; (b) the source owner submits a written certification to EPA that it will comply with

January 25, 1995

MEMORANDUM

SUBJECT: Options for Limiting the Potential to Emit (PTE) of a Stationary Source Under Section 112 and Title V of the Clean Air Act (Act)

FROM: John S. Seitz, Director /s/
Office of Air Quality Planning and Standards (MD-10)

Robert I. Van Heuvelen, Director
Office of Regulatory Enforcement (2241)

TO: Director, Air, Pesticides and Toxics Management Division, Regions I and IV
Director, Air and Waste Management Division, Region II
Director, Air, Radiation and Toxics Division, Region III
Director, Air and Radiation Division, Region V
Director, Air, Pesticides and Toxics Division, Region VI
Director, Air and Toxics Division, Regions VII, VIII, IX, and X

Many stationary source requirements of the Act apply only to "major" sources. Major sources are those sources whose emissions of air pollutants exceed threshold emissions levels specified in the Act. For instance, section 112 requirements such as MACT and section 112(g) and title V operating permit requirements largely apply only to sources with emissions that exceed specified levels and are thus major. To determine whether a source is major, the Act focuses not only on a source's actual emissions, but also on its potential emissions. Thus, a source that has maintained actual emissions at levels below the major source threshold could still be subject to major source requirements if it has the potential to emit major amounts of air pollutants. However, in situations where unrestricted operation of a source would result in a potential to emit above major-source levels, such sources may legally avoid program requirements by taking federally-enforceable permit conditions which limit emissions to levels below the applicable major source threshold. Federally-enforceable permit conditions, if violated, are subject to enforcement by the Environmental Protection Agency (EPA) or by citizens in addition to the State or Local agency.

As the deadlines for complying with MACT standards and title V operating permits approach, industry and State and local

air pollution agencies have become increasingly focused on the need to adopt and implement federally-enforceable mechanisms to limit emissions from sources that desire to limit potential emissions to below major source levels. In fact, there are numerous options available which can be tailored by the States to provide such sources with simple and effective ways to qualify as minor sources. Because there appears to be some confusion and questions regarding how potential to emit limits may be established, EPA has decided to: (1) outline the available approaches to establishing potential to emit limitations, (2) describe developments related to the implementation of these various approaches, and (3) implement a transition policy that will allow certain sources to be treated as minor for a period of time sufficient for these sources to obtain a federally-enforceable limit.

Federal enforceability is an essential element of establishing limitations on a source's potential to emit. Federal enforceability ensures the conditions placed on emissions to limit a source's potential to emit are enforceable by EPA and citizens as a legal and practical matter, thereby providing the public with credible assurances that otherwise major sources are not avoiding applicable requirements of the Act. In order to ensure compliance with the Act, any approaches developed to allow sources to avoid the major source requirements must be supported by the Federal authorities granted to citizens and EPA. In addition, Federal enforceability provides source owners and operators with assurances that limitations they have obtained from a State or local agency will be recognized by EPA.

The concept of federal enforceability incorporates two separate fundamental elements that must be present in all limitations on a source's potential to emit. First, EPA must have a direct right to enforce restrictions and limitations imposed on a source to limit its exposure to Act programs. This requirement is based both on EPA's general interest in having the power to enforce "all relevant features of SIP's that are necessary for attainment and maintenance of NAAQS and PSD increments" (see 54 FR 27275, citing 48 FR 38748, August 25, 1983) as well as the specific goal of using national enforcement to ensure that the requirements of the Act are uniformly implemented throughout the nation (see 54 FR 27277). Second, limitations must be enforceable as a practical matter.

It is important to recognize that there are shared responsibilities on the part of EPA, State, and local agencies, and on source owners to create and implement approaches to creating acceptable limitations on potential emissions. The lead responsibility for developing limitations on potential emissions rests primarily with source owners and State and local agencies. At the same time, EPA must work together with interested parties, including industry and States to ensure that clear guidance is established and that timely Federal input, including Federal approval actions, is provided where appropriate. The guidance in

this memorandum is aimed towards continuing and improving this partnership.

Available Approaches for Creating Federally-enforceable Limitations on the Potential to Emit

There is no single "one size fits all" mechanism that would be appropriate for creating federally-enforceable limitations on potential emissions for all sources in all situations. The spectrum of available mechanisms should, however, ensure that State and local agencies can create federally-enforceable limitations without undue administrative burden to sources or the agency. With this in mind, EPA views the following types of programs, if submitted to and approved by EPA, as available to agencies seeking to establish federally-enforceable potential to emit limits:

1. Federally-enforceable State operating permit programs (FESOPs) (non-title V). For complex sources with numerous and varying emission points, case-by-case permitting is generally needed for the establishment of limitations on the source's potential to emit. Such case-by-case permitting is often accomplished through a non-title V federally-enforceable State operating permit program. This type of permit program, and its basic elements, are described in guidance published in the Federal Register on June 28, 1989 (54 FR 27274). In short, the program must: (a) be approved into the SIP, (b) impose legal obligations to conform to the permit limitations, (c) provide for limits that are enforceable as a practical matter, (d) be issued in a process that provides for review and an opportunity for comment by the public and by EPA, and (e) ensure that there is no relaxation of otherwise applicable Federal requirements. The EPA believes that these type of programs can be used for both criteria pollutants and hazardous air pollutants, as described in the memorandum, "Approaches to Creating Federally-Enforceable Emissions Limits," November 3, 1993. This memorandum (referred to below as the November 1993 memorandum) is included for your information as Attachment 1. There are a number of important clarifications with respect to hazardous air pollutants subsequent to the November 1993 memorandum which are discussed below (see section entitled "Limitations on Hazardous Air Pollutants").

2. Limitations established by rules. For less complex plant sites, and for source categories involving relatively few operations that are relatively similar in nature, case-by-case permitting may not be the most administratively efficient approach to establishing federally-enforceable restrictions. One approach that has been used is to establish a general rule which creates federally-enforceable restrictions at one time for many sources (these rules have been referred to as "exclusionary" rules and by some permitting agencies as "prohibitory" rules). A specific suggested approach for volatile organic compounds (VOC) limits by rule was described in EPA's memorandum dated October

15, 1993 entitled "Guidance for State Rules for Optional Federally-Enforceable Emissions Limits Based Upon Volatile Organic Compound (VOC) Use." An example of such an exclusionary rule is a model rule developed for use in California. (The California model rule is attached, along with a discussion of its applicability to other situations--see Attachment 2). Exclusionary rules are included in a State's SIP and generally become effective upon approval by EPA.

3. General permits. A concept similar to the exclusionary rule is the establishment of a general permit for a given source type. A general permit is a single permit that establishes terms and conditions that must be complied with by all sources subject to that permit. The establishment of a general permit provides for conditions limiting potential to emit in a one-time permitting process, and thus avoids the need to issue separate permits for each source within the covered source type or category. Although this concept is generally thought of as an element of a title V permit program, there is no reason that a State or local agency could not submit a general permit program as a SIP submittal aimed at creating potential to emit limits for groups of sources. Additionally, general permits can be issued under the auspices of a SIP-approved FESOP. The advantage of a general permit, when compared to an exclusionary rule, is that upon approval by EPA of the State's permit program, a general permit could be written for one or more additional source types without triggering the need for the formal SIP revision process.

4. Construction permits. Another type of case-by-case permit is a construction permit. These permits generally cover new and modified sources, and States have developed such permit programs as an element of their SIP's. As described in the November 1993 memorandum, these State major and minor new source review (NSR) construction permits can provide for federally-enforceable limitations on a source's potential to emit. Further discussion of the use of minor source NSR programs is contained in EPA's letter to Jason Grumet, NESCAUM, dated November 2, 1994, which is contained in Attachment 3. As noted in this letter, the usefulness of minor NSR programs for the creation of potential to emit limitations can vary from State to State, and is somewhat dependent on the scope of a State's program.

5. Title V permits. Operating permits issued under the Federal title V operating permits program can, in some cases, provide a convenient and readily available mechanism to create federally-enforceable limits. Although the applicability date for part 70 permit programs is generally the driving force for most of the current concerns with respect to potential to emit, there are other programs, such as the section 112 air toxics program, for which title V permits may themselves be a useful mechanism for creating potential to emit limits. For example, many sources will be considered to be major by virtue of combustion emissions of nitrogen oxides or sulfur dioxide, and

will be required to obtain part 70 permits. Such permits could be used to establish federally-enforceable limitations that could ensure that the source is not considered a major source of hazardous air pollutants.

Practicable Enforceability

If limitations--whether imposed by SIP rules or through individual or general permits--are incomplete or vague or unsupported by appropriate compliance records, enforcement by the States, citizens and EPA would not be effective. Consequently, in all cases, limitations and restrictions must be of sufficient quality and quantity to ensure accountability (see 54 FR 27283).

The EPA has issued several guidance documents explaining the requirements of practicable enforceability (e.g., "Guidance on Limiting Potential to Emit in New Source Permitting," June 13, 1989; memorandum from John Rasnic entitled "Policy Determination on Limiting Potential to Emit for Koch Refining Company's Clean Fuels Project," March 13, 1992). In general, practicable enforceability for a source-specific permit means that the permit's provisions must specify: (1) A technically-accurate limitation and the portions of the source subject to the limitation; (2) the time period for the limitation (hourly, daily, monthly, and annual limits such as rolling annual limits); and (3) the method to determine compliance including appropriate monitoring, recordkeeping, and reporting. For rules and general permits that apply to categories of sources, practicable enforceability additionally requires that the provisions: (1) identify the types or categories of sources that are covered by the rule; (2) where coverage is optional, provide for notice to the permitting authority of the source's election to be covered by the rule; and (3) specify the enforcement consequences relevant to the rule. More specific guidance on these enforceability principles as they apply to rules and general permits is provided in Attachment 4.

Limitations on Hazardous Air Pollutants (HAP)

There are a number of important points to recognize with respect to the ability of existing State and local programs to create limitations for the 189 HAP listed in (or pursuant to) section 112(b) of the Act, consistent with the definitions of "potential to emit" and "federally-enforceable" in 40 CFR 63.2 (promulgated March 16, 1994, 59 FR 12408 in the part 63 General Provisions). The EPA believes that most State and local programs should have broad capabilities to handle the great majority of situations for which a potential to emit limitation on HAP is needed.

First, it is useful to note that the definition of potential to emit for the Federal air toxics program (see the subpart A "general provisions," section 63.2) considers, for purposes of controlling HAP emissions, federally-enforceable limitations on

criteria pollutant emissions if "the effect such limitations would have on "[hazardous air pollutant] . . . emissions" is federally-enforceable (emphasis added). There are many examples of such criteria pollutant emission limits that are present in federally-enforceable State and local permits and rules. Examples would include a limitation constraining an operation to one (time limit specified) shift per day or limitations that effectively limit operations to 2000 hours per year. Other examples would include limitations on the amount of material used, for example a permit limitation constraining an operation to using no more than 100 gallons of paint per month. Additionally, federally-enforceable permit terms that, for example, required an incinerator to be operated and maintained at no less than 1600 degrees would have an obvious "effect" on the HAP present in the inlet stream.

Another federally-enforceable way criteria pollutant limitations affect HAP can be described as a "nested" HAP limit within a permit containing conditions limiting criteria pollutants. For example, the particular VOC's within a given operation may include toluene and xylene, which are also HAP. If the VOC-limiting permit has established limitations on the amount of toluene and xylene used as the means to reduce VOC, those limitations would have an obvious "effect" on HAP as well.

In cases as described above, the "effect" of criteria pollutant limits will be straightforward. In other cases, information may be needed on the nature of the HAP stream present. For example, a limit on VOC that ensured total VOC's of 20 tons per year may not ensure that each HAP present is less than 10 tons per year without further investigation. While the EPA intends to develop further technical guidance on situations for which additional permit terms and conditions may be needed to ensure that the "effect" is enforceable as a practical matter, the EPA intends to rely on State and local agencies to employ care in drafting enforceable requirements which recognize obvious environmental and health concerns.

There are, of course, a few important pollutants which are HAP but are not criteria pollutants. Example of these would include methylene chloride and other pollutants which are considered nonreactive and therefore exempt from coverage as VOC's. Especially in cases where such pollutants are the only pollutants present, criteria pollutant emission limitations may not be sufficient to limit HAP. For such cases, the State or local agency will need to seek program approval under section 112(l) of the Act.

Section 112(l) provides a clear mechanism for approval of State and local air toxics programs for purposes of establishing HAP-specific PTE limits. The EPA intends, where appropriate, that in approving permitting programs into the SIP, to add appropriate language citing approval pursuant to section 112(l) as well. An example illustrating section 112(l) approval is the

approval of the State of Ohio's program for limiting potential to emit (see 59 FR 53587, October 25, 1994). In this notice, EPA granted approval under section 112(l) for hazardous air pollutants aspects of a State program for limiting potential to emit. Such language can be added to any federally-enforceable State operating permit program, exclusionary rule, or NSR program update SIP approval notice so long as the State or local program has the authority to regulate HAP and meets other section 112(l) approval criteria. Transition issues related to such section 112(l) approvals are discussed below.

Determination of Maximum Capacity

While EPA and States have been calculating potential to emit for a number of years, EPA believes that it is important at this time to provide some clarification on what is meant in the definition of potential to emit by the "maximum capacity of a stationary source to emit under its physical and operational design." Clearly, there are sources for which inherent physical limitations for the operation restrict the potential emissions of individual emission units. Where such inherent limitations can be documented by a source and confirmed by the permitting agency, EPA believes that States have the authority to make such judgements and factor them into estimates of a stationary source's potential to emit.

The EPA believes that the most straightforward examples of such inherent limitations is for single-emission unit type operations. For example, EPA does not believe that the "maximum capacity" language requires that owner of a paint spray booth at a small auto body shop must assume that (even if the source could be in operation year-round) spray equipment is operated 8760 hours per year in cases where there are inherent physical limitations on the number of cars that can be painted within any given period of time. For larger sources involving multiple emissions units and complex operations, EPA believes it can be more problematic to identify the inherent limitations that may exist.

The EPA intends, within its resource constraints, to issue technical assistance in this area by providing information on the type of operational limits that may be considered acceptable to limit the potential to emit for certain individual small source categories.

Transition Guidance for Section 112 and Title V Applicability

Most, if not all, States have recognized the need to develop options for limiting the potential emissions of sources and are moving forward with one or more of the strategies described in the preceding sections in conjunction with the submission and implementation of their part 70 permit programs. However, EPA is aware of the concern of States and sources that title V or section 112 implementation will move ahead of the development and

implementation of these options, leaving sources with actual emissions clearly below the major source thresholds potentially subject to part 70 and other major source requirements. Gaps could theoretically occur during the time period it takes for a State program to be designed and administratively adopted by the State, approved into the SIP by EPA, and implemented as needed to cover individual sources.

The EPA is committed to aiding all States in developing and implementing adequate, streamlined, and cost-effective vehicles for creating federally-enforceable limits on a source's potential emissions by the time that section 112 or title V requirements become effective. To help bridge any gaps, EPA will expedite its reviews of State exclusionary rules and operating permit rules by, among other things, coordinating the approval of these rules with the approval of the State's part 70 program and by using expeditious approval approaches such as "direct final" Federal Register notices to ensure that approval of these programs does not lag behind approval of the part 70 program.

In addition, in such approval notices EPA will affirm any limits established under the State's program since its adoption by the State but prior to Federal approval if such limits were established in accordance with the procedures and requirements of the approved program. An example of language affirming such limits was recently used in approving an Illinois SIP revision (see 57 FR 59931, included as Attachment 5).

The EPA remains concerned that even with expedited approvals and other strategies, sources may face gaps in the ability to acquire federally-enforceable potential to emit limits due to delays in State adoption or EPA approval of programs or in their implementation. In order to ensure that such gaps do not create adverse consequences for States or for sources, EPA is announcing a transition policy for a period up to two years from the date of this memorandum. The EPA intends to make this transition policy available at the discretion of the State or local agency to the extent there are sources which the State believes can benefit from such a transition policy. The transition period will extend from now until the gaps in program implementation are filled, but no later than January 1997. Today's guidance, which EPA intends to codify through a notice and comment rulemaking, provides States discretion to use the following options for satisfying potential to emit requirements during this transition period.

1. Sources maintaining emissions below 50 percent of all applicable major source requirements. For sources that typically and consistently maintain emissions significantly below major source levels, relatively few benefits would be gained by making such sources subject to major source requirements under the Act. For this reason, many States are developing exclusionary rules and general permits to create simple, streamlined means to ensure that these sources are not considered major sources. To ease the burden on States' implementation of title V, and to ensure that

delays in EPA's approval of these types of programs will not cause an administrative burden on the States, EPA is providing a 2-year transition period for sources that maintain their actual emissions, for every consecutive 12-month period (beginning with the 12 months immediately preceding the date of this memorandum), at levels that do not exceed 50 percent of any and all of the major stationary source thresholds applicable to that source. A source that exceeds the 50 percent threshold, without complying with major source requirements of the Act (or without otherwise limiting its potential to emit), could be subject to enforcement. For this 2-year period, such sources (i.e., those emitting under the 50 percent threshold) would not be treated as major sources and would not be required to obtain a permit that limits their potential to emit. To qualify under this transition policy, sources must maintain adequate records on site to demonstrate that emissions are maintained below these thresholds for the entire transition period. Consistent with the California approach, EPA believes it is appropriate for the amount of recordkeeping to vary according to the level of emissions (see paragraphs 1.2 and 4.2 of the attached rule).

2. Larger sources with State limits. For the 2-year transition period, restrictions contained in State permits issued to sources above the 50 percent threshold would be treated by EPA as acceptable limits on potential to emit, provided: (a) the permit is enforceable as a practical matter; (b) the source owner submits a written certification to EPA that it will comply with the limits as a restriction on its potential to emit; and (c) the source owner, in the certification, accepts Federal and citizen enforcement of the limits (this is appropriate given that the limits are being taken to avoid otherwise applicable Federal requirements). Such limits will be valid for purposes of limiting potential to emit from the date the certification is received by EPA until the end of the transition period. States interested in making use of this portion of the transition policy should work with their Regional Office to develop an appropriate certification process.

3. Limits for noncriteria HAP. For noncriteria HAP for which no existing federally-approved program is available for the creation of federally-enforceable limits, the 2-year transition period provides for sufficient time to gain approval pursuant to section 112(l). For the 2-year transition period, State restrictions on such noncriteria pollutants issued to sources with emissions above the 50 percent threshold would be treated by EPA as limiting a source's potential to emit, provided that: (a) the restrictions are enforceable as a practical matter; (b) the source owner submits a written certification to EPA that it will comply with the limits as a restriction on its potential to emit; and (c) the source owner, in the certification, accepts Federal and citizen enforcement of the limits. Such limits will be valid for purposes of limiting potential to emit from the date the certification is received by EPA until the end of the transition period.

The Regional Offices should send this memorandum, including the attachments, to States within their jurisdiction. Questions concerning specific issues and cases should be directed to the appropriate Regional Office. Regional Office staff may contact Timothy Smith of the Integrated Implementation Group at 919-541-4718, or Clara Poffenberger with the Air Enforcement Division at 202-564-8709.

Attachments

cc: Air Branch Chief, Region I-X
Regional Counsels

November 3, 1993

MEMORANDUM

SUBJECT: Approaches to Creating Federally-Enforceable Emissions Limits

FROM: John S. Seitz, Director
Office of Air Quality Planning and Standards (MD-10)

TO: Director, Air, Pesticides and Toxics Management Division, Regions I and IV
Director, Air and Waste Management Division, Region II
Director, Air, Radiation and Toxics Division, Region III
Director, Air and Radiation Division, Region V
Director, Air, Pesticides and Toxics Division, Region VI
Director, Air and Toxics Division, Regions VII, VIII, IX, and X

The new operating permits program under title V of the Clean Air Act (Act), combined with the additional and lower thresholds for "major" sources also provided by the 1990 Amendments to the Act, has led to greatly increased interest by State and local air pollution control agencies, as well as sources, in obtaining federally-enforceable limits on source potential to emit air pollutants. Such limits entitle sources to be considered "minor" for the purposes of title V permitting and various other requirements of the Act. Numerous parties have identified this as a high priority concern potentially involving thousands of sources in each of the larger States.

The issue of creating federally-enforceable emissions limits has broad implications throughout air programs. Although many of the issues mentioned above have arisen in the context of the title V permits program, the same issues exist for other programs, including those under section 112 of the Act. As discussed below, traditional approaches to creating federally-enforceable emissions limits may be unnecessarily burdensome and time-consuming for certain types and sizes of sources. In addition, they have been of limited usefulness with respect to creating such limits for emissions of hazardous air pollutants (HAP's).

The purpose of this memorandum is to respond to these needs by announcing the availability of two further approaches to creating federally-enforceable emissions limits: the extension of existing criteria pollutant program mechanisms for HAP program purposes, and the creation of certain classes of standardized emissions limits by rule. We believe that these options are responsive to emerging air program implementation issues and provide a reasonable balance between the need for administrative streamlining and the need for emissions limits that are technically sound and enforceable.

Background

Various regulatory options already exist for the creation of federally-enforceable limits on potential to emit. These were summarized in a September 18, 1992 memorandum from John Calcagni, Director, Air Quality Management Division. That memorandum identified the five regulatory mechanisms generally seen as available. These are: State major and minor new source review (NSR) permits [if the NSR program has been approved into the State implementation plan (SIP) and meets certain procedural requirements]; operating permits based on programs approved into the SIP pursuant to the criteria in the June 28, 1989 Federal Register (54 FR 27274); and title V permits (including general permits). Also available are SIP limits for individual sources and limits for HAP's created through a State program approved pursuant to section 112(l) of the Act.

Regional Office and State air program officials realize that these five options are generally workable, but feel that the programs emerging from the 1990 Amendments present certain further needs that are not well met. They note that NSR is not always available, title V permitting can be more rigorous than appropriate for those sources that are in fact quite small, and that general permits have limitations in their usefulness. The use of State operating permits approved into the SIP pursuant to the June 28, 1989 Federal Register is generally considered to be a promising option for some of these transactions; however, these programs do not regulate toxics directly.

State Operating Permits for Both Criteria Pollutants and HAP's

As indicated above, State operating permits issued by programs approved into the SIP pursuant to the process provided in the June 28, 1989 Federal Register are recognized as federally enforceable. This is a useful option, but has historically been viewed as limited in its ability to directly create emissions limits for HAP's because of the SIP focus on criteria pollutants.

Since that option was created, however, section 112 of the Act has been rewritten, creating significant new regulatory requirements and conferring additional responsibilities and authorities upon the Environmental Protection Agency (EPA) and the States. Section 112 now mandates a wide range of activities: source-specific preconstruction reviews, areawide approaches to controlling risk, provisions for permitting pursuant to the title V permitting program, and State program provisions in section 112(l) that are similar to aspects of the SIP program. A result of these changes is that implementation of toxics programs will entail the use of many of the same administrative mechanisms as have been in use for the criteria pollutant programs.

Upon further analysis of these new program mandates and corresponding authorities, EPA concludes that section 112 of the Act, including section 112(l), authorizes it to recognize these same State operating permits programs for the creation of federally-enforceable emissions limits in support of the implementation of section 112. Congress recognized, and longstanding State practice confirms, that operating permits are core-implementing mechanisms for air quality program requirements. This was EPA's basis for concluding that section 110 of the Act authorizes the recognition and approval into the SIP of operating permits pursuant to the June 28, 1989 promulgation, even though section 110 did not expressly provide for such a program. Similarly, broad provision of section 112(l) for "a program for the implementation and enforcement . . . of emission standards and other requirements for air pollutants subject to this section" provides a sound basis for EPA recognition of State operating permits for implementation and enforcement of section 112 requirements in the same manner as these permitting processes were recognized pursuant to section 110.

In implementing this authority to approve State operating permits programs pursuant to section 112, it should be noted that the specific criteria for what constitutes a federally-enforceable permit are also the same as for the existing SIP programs. The June 28, 1989 Federal Register essentially addressed in a generic sense the core criteria for creating federally-enforceable emissions limits in operating permits: appropriate procedural mechanisms, including public notice and opportunity for comment, statutory authority for EPA approval of the State program, and enforceability as a practical matter. The EPA did this in the context of SIP development, not because these criteria are specific to the SIP, but because section 110 of the Act was seen as our only certain statutory basis for this prior to the 1990 Amendments. Based on the discussion above, States can extend or develop State operating permits programs for toxics

pursuant to the criteria set forth in the June 28, 1989 Federal Register. The EPA is also evaluating analogous opportunities to enhance State NSR programs to address toxics and will address this in future guidance.

This is a significant opportunity to limit directly the emissions of HAP's. It also offers the advantage of the administrative efficiencies that arise from using existing administrative mechanisms, as opposed to creating additional ones.

States are encouraged to consult with EPA Regional Offices to discuss the details of adapting their current programs to carry out these additional functions. The EPA will consider State permitting programs meeting the criteria in the June 28, 1989 Federal Register as being approvable for HAP program functions as well. States may submit their programs for implementing this process with their part 70 program submittals, or at such other time as they choose. The EPA has various options for administratively recognizing these State program submittals. The EPA plans initially to review these State programs as SIP review actions, but with official recognition pursuant to authorities in both sections 110 and 112. Once rulemaking pursuant to section 112(l) of the Act is completed, EPA expects to use the process developed in that rule for approving State programs for HAP's. The section 112(l) process may be especially useful prior to EPA approval and implementation of the State title V programs. The reader may wish to refer to the process for certain section 112(l) approvals proposed on May 19, 1993 (58 FR 29296) (see section 63.91).

The General Provisions (40 CFR part 63) establish the applicability framework for the implementation of section 112. In the final rule, EPA will indicate that State operating permits programs which meet the procedural requirements of the June 28, 1989 Federal Register can be used to develop federally-enforceable emissions limits for HAP's, thereby limiting a source's potential to emit. In addition, after we gain implementation experience, EPA will be evaluating the usefulness of further rulemaking to define more specific criteria by which this process may be used in the implementation of programs under section 112 of the Act. Any such rulemaking could similarly be incorporated into the General Provisions in part 63.

State-Standardized Processes Created by Rule to Establish Source-Specific, Federally-Enforceable Emissions Limits

State air program officials have highlighted specific types of sources that are of particular administrative concern because

of their nature and number. These include sources whose emissions are primarily volatile organic compounds (VOC) arising from use of solvents or coatings, such as automobile body shops. Another example is fuel-burning sources that have low actual emissions because of limited hours of operation, but with the potential to emit sulfur dioxide in amounts sufficient to cause them to be classified as major sources.

The EPA recognizes that emissions limitations for some processes can be created through standardized protocols. For example, limitations on potential to emit could be established for certain VOC sources on the basis of limits on solvent use, backed up by recordkeeping and by periodic reporting. Similarly, limitations on sulfur dioxide emissions could be based on specified sulfur content of fuel and the source's obligation to limit usage to certain maximum amounts. Limits on hours of operation may be acceptable for certain others sources, such as standby boilers. In all cases, of course, the technical requirements would need to be supported by sufficient compliance procedures, especially monitoring and reporting, to be considered enforceable.

The EPA concludes that such protocols could be relied on to create federally-enforceable limitations on potential to emit if adopted through rulemaking and approved by EPA. Although such an approach is appropriate for only a limited number of source categories, these categories include large numbers of sources, such as dry cleaners, auto body shops, gas stations, printers, and surface coaters. If such standardized control protocols are sufficiently reliable and replicable, EPA and the public need not be involved in their application to individual sources, as long as the protocols themselves have been subject to notice and opportunity to comment and have been approved by EPA into the SIP.

To further illustrate this concept and to provide implementation support to the States, EPA has recently released guidance on one important way of using this process. This document, entitled "Guidance for State Rules for Optional Federally-Enforceable Emissions Limits Based on Volatile Organic Compound Use," was issued by D. Kent Berry, Acting Director, Air Quality Management Division, on October 15, 1993. It describes approvable processes by which States can create federally-enforceable emissions limits for VOC for large numbers of sources in a variety of source categories.

States have flexibility in their choice of administrative process for implementation. In some cases, it may be adequate for a State to apply these limits to individual sources through a

registration process rather than a permit. A source could simply submit a certification to the State committing to comply with the terms of an approved protocol. Violations of these certifications would constitute SIP violations, in the case of protocols approved into the SIP, and be subject to the same enforcement mechanisms as apply in the case of any other SIP violation. Such violations would, of course, also subject the source to enforcement for failure to comply with the requirements that apply to major sources, such as the requirement to obtain a title V permit or comply with various requirements of section 112 of the Act.

Some States have also indicated an interest in more expansive approaches to implementing this concept, such as making presumptive determinations of control equipment efficiency with respect to particular types of sources and pollutants. While such approaches are more complicated and present greater numbers of concerns in the EPA review process, they offer real potential if properly crafted. The EPA will evaluate State proposals and approve them if they are technically sound and enforceable as a practical matter.

States may elect to use this approach to create federally-enforceable emissions limits for sources of HAP's as well. Based on the same authorities in section 112 of the Act, as cited above in the case of operating permits, EPA can officially recognize such State program submittals. As with the operating permits option discussed in the preceding section, EPA plans initially to review these activities as SIP revisions, but with approval pursuant to both sections 110 and 112 of the Act, and approve them through the section 112(l) process when that rule is final.

Implementation Guidance

As indicated above, the creation of federally-enforceable limits on a source's potential to emit involves the identification of the procedural mechanisms for these efforts, including the statutory basis for their approval by EPA, and the technical criteria necessary for their implementation. Today's guidance primarily addresses the procedural mechanisms available and the statutory basis for EPA approval.

The EPA will be providing further information with respect to the implementation of these concepts. As described above, the first portion of this guidance, addressing limits on VOC emissions, was issued on October 15, 1993. My office is currently working with Regional Offices and certain States in order to assist in the development of program options under consideration by those States. We will provide technical and

regulatory support to other State programs and will make the results of these efforts publicly available through the Office of Air Quality Planning and Standards (OAQPS) Technology Transfer Network bulletin board.

We will provide further support through the release of a document entitled "Enforceability Requirements for Limiting Potential to Emit Through SIP Rules and General Permits," which is currently undergoing final review within EPA. In addition, EPA will be highlighting options for use of existing technical guidance with respect to creating sound and enforceable emissions limits. An important example of such guidance is the EPA "Blue Book," which has been in use by States for the past 5 years as part of their VOC control programs.

States are encouraged to discuss program needs with their EPA Regional Offices. The OAQPS will work with them in addressing approvals. As indicated, additional technical guidance for implementing these approaches is underway and will be made publicly available soon. For further information, please call Kirt Cox at (919) 541-5399.

cc: Air Branch Chief, Regions I-X
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OAQPS Division Directors
A. Eckert
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Attachment 2
California Example Rule

Background

State agencies and local agencies (such as the Air Pollution Control Districts in California) can adopt rules which place emissions limitations on a category of sources through a combination of limitations and compliance requirements. These rules, if practicably enforceable, adopted with adequate public process and approved into the SIP, can validly limit potential to emit. Moreover, because State or local rules can cover many sources with a single regulatory action, they are well-suited to cover large populations of smaller sources. Many States are finding that a combination of SIP rules or general permits for smaller sources combined with individual permits for larger sources provides the simplest means of ensuring that minor source emissions are adequately limited.

Discussion of California Rule

The EPA, the California Air Pollution Control Officers Association and the California Air Resources Board recently completed development of a model rule for use by the California Air Pollution Control Districts. Because the rule contains several innovations, including covering all source categories, and should prove to be an inexpensive and efficient means of limiting the potential emissions of thousands of sources in California, the EPA believes that parts of the rule may be helpful for other States to review and consider.

The proposed rule is designed to place smaller sources under annual emissions limits which restrict their "potential to emit" and thus their exposure to "major source" requirements of the Clean Air Act. The rule ensures compliance with the annual limit through a series of recordkeeping and reporting requirements. These requirements are tapered to reduce burdens as source size decreases. The rule creates three levels of responsibility. The first tier requires both recordkeeping and reporting. The second tier requires only recordkeeping with no reporting. For instance, sources that emit only attainment pollutants which limit their emissions to below 25 tons per year have no reporting requirement. For sources under 5 tons per year (or 2 tons per year for a single hazardous air pollutant), there is no specified recordkeeping or reporting requirements although these sources must still maintain sufficient records to demonstrate their compliance with the rule.

To the extent possible, the recordkeeping requirements are itemized by source category and are designed to take advantage of records that sources are already likely to maintain. Through these measures, the rule should assure the public that the sources subject to the rule are properly maintaining their

emissions below major source levels, while maximizing source flexibility and minimizing paperwork.

There are other safeguards built into the rule and in California's overall regulatory scheme which add to the EPA's confidence that the proposal can work. The rule applies only to sources that agree to limit their emissions to 50 percent or less of the major source threshold. Sources with emissions above this level must either comply with all applicable "major source" requirements or secure a source-specific, federally-enforceable Air Pollution Control District permit that properly limits emissions to levels below major source thresholds. Some sources may be able to qualify for an "alternative operation limit" which places simple operating limits on a source's combustion of fuel, sale of gasoline or use of a solvent. Because of the ease with which compliance can be tracked with operational limits, the rule allows sources using these limits to go up to 80 percent of the major source threshold. Either way, EPA believes that the rule creates a sufficient compliance buffer.

Moreover, California has an extensive permit and inspection infrastructure that increases EPA's confidence that the rule will prove adequate for limiting emissions. California law requires that, upon annual renewal, each permit be reviewed to determine that the permit conditions are adequate to assure compliance with district rules and other applicable requirements. In addition, most California Air Pollution Control Districts have an extensive inspection program which means that compliance with the rule will be spot checked by inspectors visiting the source.

Finally, the rule is designed to provide smaller sources with a federally-enforceable means of limiting their potential emissions. The rule excludes sources that already have a federally enforceable operating permit, and it cannot be used to avoid complying with an permit required by the Air Pollution Control Districts.

Aside from these general observations, EPA did have a number of comments regarding specific language included in the rule. The three most significant comments are set forth below. However, States interested in using this rule as a model should be aware that it was specifically designed to fit with California State law and existing SIP provisions and that States may wish to consider making other changes to reflect their individual needs and requirements.

> Section 2.7: In a PM-10 nonattainment area, PM-10 precursors may need to be included when determining whether a source is major as required by section 189(e) of the Clean Air Act. Districts adopting this model rule should consider whether the definition of "Major Source" in section 2.7 should be augmented to include sources of PM-10 precursors.

Section 4.2(D): The rule allows sources using air pollution control equipment to demonstrate compliance through the maintenance of general records on the unit and its operations. EPA has always been concerned with this provision since many pollution control units are only effective if specific operating procedures are followed. These specifics are best set and tracked in a source-specific, federally enforceable permit. For this reason, section 1.3 sunsets the applicability of the draft rule, after January 1, 1999, to pollution control equipment. For the coverage to continue beyond that date, a district must extend the provision. The EPA will disapprove the extension if the experience with the rule demonstrates that more specific conditions are needed to ensure that pollution control devices are being used properly and continuously.

Section 4.2(E): In general, EPA does not favor the use of generic or catch-all recordkeeping requirements for compliance purposes. There is a fear that the records necessary to show compliance for individual source categories will not be specified by the generic provision and thus will not be maintained. For this reason, EPA urges the Board and the Districts to evaluate regularly whether specific recordkeeping requirements should be developed for additional categories. As we noted during our negotiations, EPA will evaluate this question after the rule is in effect for three years and the EPA may seek -- through a SIP call or through other mechanisms -- to require additional recordkeeping requirements if there are implementation problems with this generic category. The districts may wish to add to the rule a provision which would authorize them to add recordkeeping requirements for additional source categories without a further SIP revision.

State of California
Proposed Rule to Limit
Potential to Emit
January 11, 1995

APPLICABILITY

General Applicability: This rule shall apply to any stationary source which would, if it did not comply with the limitations set forth in this rule, have the potential to emit air contaminants equal to or in excess of the threshold for a major source of regulated air pollutants or a major source of hazardous air pollutants (HAPs) and which meets one of the following conditions:

A In every 12-month period, the actual emissions of the stationary source are less than or equal to the emission limitations specified in section 3.1 below; or

B. In every 12-month period, at least 90 percent of the emissions from the stationary source are associated with an operation limited by any one of the alternative operational limits specified in section 6.1 below.

Stationary Source with De Minimis Emissions: The recordkeeping and reporting provisions in sections 4.0, 5.0 and 6.0 below shall not apply to a stationary source with de minimis emissions or operations as specified in either subsection A or B below:

A. In every 12-month period, the stationary source emits less than or equal to the following quantities of emissions:

5 tons per year of a regulated air pollutant (excluding HAPs),

2 2 tons per year of a single HAP,

3. 5 tons per year of any combination of HAPs, and

4. 20 percent of any lesser threshold for a single HAP that the United States Environmental Protection Agency (U.S. EPA) may establish by rule.

B. In every 12-month period, at least 90 percent of the stationary source's emissions are associated with an operation for which the throughput is less than or equal to one of the quantities specified in subsections 1 through 9 below:

1,400 gallons of any combination of solvent-containing materials but no more than 550 gallons of any one solvent-containing material, provided that the materials do not contain the following: methyl chloroform (1,1,1-trichloroethane), methylene chloride (dichloromethane), tetrachloroethylene (perchloroethylene), or trichloroethylene;

2. 750 gallons of any combination of solvent-containing materials where the materials contain the following: methyl chloroform (1,1,1-trichloroethane), methylene chloride (dichloromethane), tetrachloroethylene (perchloroethylene), or trichloroethylene, but not more than 300 gallons of any one solvent-containing material;

3 ____ gallons of solvent-containing (or volatile organic compound containing) material used at a paint spray unit(s);[1]

4. 4,400,000 gallons of gasoline dispensed from equipment with Phase I and II vapor recovery systems;

5. 470,000 gallons of gasoline dispensed from equipment without Phase I and II vapor recovery systems;

6. 1,400 gallons of gasoline combusted;

7. 16,600 gallons of diesel fuel combusted;

8. 500,000 gallons of distillate oil combusted, or

9. 71,400,000 cubic feet of natural gas combusted.

Within 30 days of a written request by the District or the U.S. EPA, the owner or operator of a stationary source not maintaining records pursuant to sections 4.0 or 6.0 shall demonstrate that the stationary source's emissions or throughput are not in excess of the applicable quantities set forth in subsection A or B above.

1.3 Provision for Air Pollution Control Equipment: The owner or operator of a stationary source may take into account the operation of air pollution control equipment on the capacity of the source to emit an air contaminant if the equipment is required by Federal, State, or District rules and

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[1]To be determined based on district SIP rules

regulations or permit terms and conditions. The owner or operator of the stationary source shall maintain and operate such air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. This provision shall not apply after January 1, 1999 unless such operational limitation is federally enforceable or unless the District Board specifically extends this provision and it is submitted to the U.S. EPA. Such extension shall be valid unless, and until, the U.S. EPA disapproves the extension of this provision.

1.4 Exemption, Stationary Source Subject to Rule ____ (District Title V rule): This rule shall not apply to the following stationary sources:

A. Any stationary source whose actual emissions, throughput, or operation, at any time after the effective of this rule, is greater than the quantities specified in sections 3.1 or 6.1 below and which meets both of the following conditions:

1. The owner or operator has notified the District at least 30 days prior to any exceedance that s/he will submit an application for a Part 70 permit, or otherwise obtain federally-enforceable permit limits, and

2. A complete Part 70 permit application is received by the District, or the permit action to otherwise obtain federally-enforceable limits is completed, within 12 months of the date of notification.

However, the stationary source may be immediately subject to applicable federal requirements, including but not limited to, a maximum achievable control technology (MACT) standard.

B Any stationary source that has applied for a Part 70 permit in a timely manner and in conformance with Rule ____ (the District's Title V rule), and is awaiting final action by the District and U.S. EPA.

C. Any stationary source required to obtain an operating permit under Rule ____ (the District's Title V rule) for any reason other than being a major source.

D Any stationary source with a valid Part 70 permit

Notwithstanding subsections B and D above, nothing in this section shall prevent any stationary source which has had a Part 70 permit from qualifying to comply with this rule in the future in lieu of maintaining an application for a Part 70 permit or upon rescission of a Part 70 permit if the owner or operator demonstrates that the stationary source is

in compliance with the emissions limitations in section 3.1 below or an applicable alternative operational limit in section 6.1 below.

Exemption, Stationary Source with a Limitation on Potential to Emit: this rule shall not apply to any stationary source which has a valid operating permit with federally-enforceable conditions or other federally-enforceable limits limiting its potential to emit to below the applicable threshold(s) for a major source as defined in sections 2.7 and 2.8 below.

6 Within three years of the effective date of Rule ____ (District Title V rule), the District shall maintain and make available to the public upon request, for each stationary source subject to this rule, information identifying the provisions of this rule applicable to the source.

This rule shall not relieve any stationary source from complying with requirements pertaining to any otherwise applicable preconstruction permit, or to replace a condition or term of any preconstruction permit, or any provision of a preconstruction permitting program.[2] This does not preclude issuance of any preconstruction permit with conditions or terms necessary to ensure compliance with this rule.

[2]For example, PSD, NSR, and ATC

DEFINITIONS

All terms shall retain the definitions provided under 40 CFR Part 70.2 [alternatively, the District Title V rule] unless otherwise defined herein.

12-month period: A period of twelve consecutive months determined on a rolling basis with a new 12-month period beginning on the first day of each calendar month.

2.2 Actual Emissions: The emissions of a regulated air pollutant from a stationary source for every 12-month period. Valid continuous emission monitoring data or source test data shall be preferentially used to determine actual emissions. In the absence of valid continuous emissions monitoring data or source test data, the basis for determining actual emissions shall be: throughputs of process materials; throughputs of materials stored; usage of materials; data provided in manufacturer's product specifications, material volatile organic compound (VOC) content reports or laboratory analyses; other information required by this rule and applicable District, State and Federal regulations; or information requested in writing by the District. All calculations of actual emissions shall use U.S. EPA, California Air Resources Board (CARB) or District approved methods, including emission factors and assumptions.

2.3 Alternative Operational Limit: A limit on a measurable parameter, such as hours of operation, throughput of materials, use of materials, or quantity of product, as specified in Section 6.0, Alternative Operational Limit and Requirements.

Emission Unit: Any article, machine, equipment, operation, contrivance or related groupings of such that may produce and/or emit any regulated air pollutant or hazardous air pollutant.

Federal Clean Air Act: The federal Clean Air Act (CAA) as amended in 1990 (42 U.S.C. section 7401 et seq.) and its implementing regulations.

Hazardous Air Pollutant: Any air pollutant listed pursuant to section 112(b) of the federal Clean Air Act.

Major Source of Regulated Air Pollutants (excluding HAPs): A stationary source that emits or has the potential to emit a regulated air pollutant (excluding HAPs) in quantities equal to or exceeding the lesser of any of the following thresholds:

A. 100 tons per year (tpy) of any regulated air pollutant;

B. 50 tpy of volatile organic compounds or oxides of nitrogen for a federal ozone nonattainment area classified as serious, 25 tpy for an area classified as severe, or 10 tpy for an area classified as extreme; and

C 70 tpy of PM_{10} for a federal PM_{10} nonattainment area classified as serious.

Fugitive emissions of these pollutants shall be considered in calculating total emissions for stationary sources in accordance with 40 CFR Part 70.2 "Definitions- Major source(2)."

Major Source of Hazardous Air Pollutants: A stationary source that emits or has the potential to emit 10 tons per year or more of a single HAP listed in section 112(b) of the CAA, 25 tons per year or more of any combination of HAPs, or such lesser quantity as the U.S. EPA may establish by rule. Fugitive emissions of HAPs shall be considered in calculating emissions for all stationary sources. The definition of a major source of radionuclides shall be specified by rule by the U.S. EPA .

Part 70 Permit: An operating permit issued to a stationary source pursuant to an interim, partial or final Title V program approved by the U.S. EPA.

2.10 Potential to Emit: The maximum capacity of a stationary source to emit a regulated air pollutant based on its physical and operational design. Any physical or operational limitation on the capacity of the stationary source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design only if the limitation is federally enforceable.

2.11 Process Statement: An annual report on permitted emission units from an owner or operator of a stationary source certifying under penalty of perjury the following: throughputs of process materials; throughputs of materials stored; usage of materials; fuel usage; any available continuous emissions monitoring data; hours of operation; and any other information required by this rule or requested in writing by the District.

2.12 Regulated Air Pollutant: The following air pollutants are regulated:

A Oxides of nitrogen and volatile organic compounds

B Any pollutant for which a national ambient air quality standard has been promulgated;

C. Any Class I or Class II ozone depleting substance subject to a standard promulgated under Title VI of the federal Clean Air Act;

D. Any pollutant that is subject to any standard promulgated under section 111 of the federal Clean Air Act; and

E Any pollutant subject to a standard or requirement promulgated pursuant to section 112 of the federal Clean Air Act, including:

1. Any pollutant listed pursuant to section 112(r) (Prevention of Accidental Releases) shall be considered a regulated air pollutant upon promulgation of the list.

2. Any HAP subject to a standard or other requirement promulgated by the U.S. EPA pursuant to section 112(d) or adopted by the District pursuant to 112(g) and (j) shall be considered a regulated air pollutant for all sources or categories of sources: 1) upon promulgation of the standard or requirement, or 2) 18 months after the standard or requirement was scheduled to be promulgated pursuant to section 112(e)(3).

3 Any HAP subject to a District case-by-case emissions limitation determination for a new or modified source, prior to the U.S. EPA promulgation or scheduled promulgation of an emissions limitation shall be considered a regulated air pollutant when the determination is made pursuant to section 112(g)(2). In case-by-case emissions limitation determinations, the HAP shall be considered a regulated air pollutant only for the individual source for which the emissions limitation determination was made.

EMISSION LIMITATIONS

Unless the owner or operator has chosen to operate the stationary source under an alternative operational limit specified in section 6.1 below, no stationary source subject to this rule shall emit in every 12-month period more than the following quantities of emissions:

A. 50 percent of the major source thresholds for regulated air pollutants (excluding HAPs),

B. 5 tons per year of a single HAP

C. 12.5 tons per year of any combination of HAPs, and

D 50 percent of any lesser threshold for a single HAP as the U.S. EPA may establish by rule.

3.2 The APCO shall evaluate a stationary source's compliance with the emission limitations in section 3.1 above as part of the District's annual permit renewal process required by Health & Safety Code section 42301(e). In performing the evaluation, the APCO shall consider any annual process statement submitted pursuant to Section 5.0, Reporting Requirements. In the absence of valid continuous emission monitoring data or source test data, actual emissions shall be calculated using emissions factors approved by the U.S. EPA , CARB, or the APCO.

Unless the owner or operator has chosen to operate the stationary source under an alternative operational limit specified in section 6.1 below, the owner or operator of a stationary source subject to this rule shall obtain any necessary permits prior to commencing any physical or operational change or activity which will result in actual emissions that exceed the limits specified in section 3.1 above.

4.0 RECORDKEEPING REQUIREMENTS

Immediately after adoption of this rule, the owner or operator of a stationary source subject to this rule shall comply with any applicable recordkeeping requirements in this section. However, for a stationary source operating under an alternative operational limit, the owner or operator shall instead comply with the applicable recordkeeping and reporting requirements specified in Section 6.0, Alternative Operational Limit and Requirements. The recordkeeping requirements of this rule shall not replace any recordkeeping requirement contained in an operating permit or in a District, State, or Federal rule or regulation.

4.1. A stationary source previously covered by the provisions in section 1.2 above shall comply with the applicable provisions of section 4.0 above and sections 5.0 and 6.0 below if the stationary source exceeds the quantities specified in section 1.2.A above.

The owner or operator of a stationary source subject to this rule shall keep and maintain records for each permitted

emission unit or groups of permitted emission units[3] sufficient to determine actual emissions. Such information shall be summarized in a monthly log, maintained on site for five years, and be made available to District, CARB, or U.S. EPA staff upon request.

A Coating/Solvent Emission Unit

The owner or operator of a stationary source subject to this rule that contains a coating/solvent emission unit or uses a coating, solvent, ink or adhesive shall keep and maintain the following records:

1. A current list of all coatings, solvents, inks and adhesives in use. This list shall include: information on the manufacturer, brand, product name or code, VOC content in grams per liter or pounds per gallon, HAPS content in grams per liter or pounds per gallon, or manufacturer's product specifications, material VOC content reports or laboratory analyses providing this information;

2. A description of any equipment used during and after coating/solvent application, including type, make and model; maximum design process rate or throughput; control device(s) type and description (if any); and a description of the coating/solvent application/drying method(s) employed;

3. A monthly log of the consumption of each solvent (including solvents used in clean-up and surface preparation), coating, ink and adhesive used; and

4. All purchase orders, invoices, and other documents to support information in the monthly log.

B. Organic Liquid Storage Unit

The owner or operator of a stationary source subject to this rule that contains a permitted organic liquid storage unit shall keep and maintain the following records:

1. A monthly log identifying the liquid stored and monthly throughput; and

2 Information on the tank design and specifications including control equipment.

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[3]In some cases it may be appropriate to keep records on groups of emission units which are connected in series. Examples are internal combustion engines in the oil fields with a common fuel line, or a series of paint spray booths with a common feed.

C. Combustion Emission Unit

The owner or operator of a stationary source subject to this rule that contains a combustion emission unit shall keep and maintain the following records:

1 Information on equipment type, make and model, maximum design process rate or maximum power input/output, minimum operating temperature (for thermal oxidizers) and capacity, control device(s) type and description (if any) and all source test information; and

2. A monthly log of hours of operation, fuel type, fuel usage, fuel heating value (for non-fossil fuels; in terms of BTU/lb or BTU/gal), percent sulfur for fuel oil and coal, and percent nitrogen for coal.

D. Emission Control Unit

The owner or operator of a stationary source subject to this rule that contains an emission control unit shall keep and maintain the following records:

1. Information on equipment type and description, make and model, and emission units served by the control unit;

2 Information on equipment design including where applicable: pollutant(s) controlled; control effectiveness; maximum design or rated capacity; inlet and outlet temperatures, and concentrations for each pollutant controlled; catalyst data (type, material, life, volume, space velocity, ammonia injection rate and temperature); baghouse data (design, cleaning method, fabric material, flow rate, air/cloth ratio); electrostatic precipitator data (number of fields, cleaning method, and power input); scrubber data (type, design, sorbent type, pressure drop); other design data as appropriate; all source test information; and

3. A monthly log of hours of operation including notation of any control equipment breakdowns, upsets, repairs, maintenance and any other deviations from design parameters.

E General Emission Unit

The owner or operator of a stationary source subject to this rule that contains an emission

unit not included in subsections A, B or C above shall keep and maintain the following records:

1. Information on the process and equipment including the following: equipment type, description, make and model; maximum design process rate or throughput; control device(s) type and description (if any);

2. Any additional information requested in writing by the APCO;

3. A monthly log of operating hours, each raw material used and its amount, each product produced and its production rate; and

4. Purchase orders, invoices, and other documents to support information in the monthly log.

REPORTING REQUIREMENTS

At the time of annual renewal of a permit to operate under Rule _____ (the District's general permitting rule), each owner or operator of a stationary source subject to this rule shall submit to the District a process statement. The statement shall be signed by the owner or operator and certify that the information provided is accurate and true.

For the purpose of determining compliance with this rule, this requirement shall not apply to stationary sources which emit in every 12-month period less than or equal to the following quantities:

A. For any regulated air pollutant (excluding HAPs),

1. 25 tons per year including a regulated air pollutant for which the District has a federal area designation of attainment, unclassified, transitional, or moderate nonattainment,

2. 15 tons per year for a regulated air pollutant for which the District has a federal area designation of serious nonattainment,

3 6.25 tons per year for a regulated air pollutant for which the District has a federal area designation of severe nonattainment,

B. 2.5 tons per year of a single HAP

C 6.25 tons per year of any combination of HAPs, and

D. 25 percent of any lesser threshold for a single HAP as the U.S. EPA may establish by rule.

A stationary source previously covered by provisions in section 5.2 above shall comply with the provisions of section 5.1 above if the stationary source exceeds the quantities specified in section 5.2.

Any additional information requested by the APCO under section 5.1 above shall be submitted to the APCO within 30 days of the date of request.

6.0 ALTERNATIVE OPERATIONAL LIMIT AND REQUIREMENTS

[The District may propose additional alternative operational limits]

The owner or operator may operate the permitted emission units at a stationary source subject to this rule under any one alternative operational limit, provided that at least 90 percent of the stationary source's emissions in every 12-month period are associated with the operation(s) limited by the alternative operational limit.

6.1 Upon choosing to operate a stationary source subject to this rule under any one alternative operational limit, the owner or operator shall operate the stationary source in compliance with the alternative operational limit and comply with the specified recordkeeping and reporting requirements.

A. The owner or operator shall report within 24 hours to the APCO any exceedance of the alternative operational limit.

B. The owner or operator shall maintain all purchase orders, invoices, and other documents to support information required to be maintained in a monthly log. Records required under this section shall be maintained on site for five years and be made available to District or U.S. EPA staff upon request.

C. Gasoline Dispensing Facility Equipment with Phase I and II Vapor Recovery Systems

The owner or operator shall operate the gasoline dispensing equipment in compliance with the following requirements:

1. No more than 7,000,000 gallons of gasoline shall be dispensed in every 12-month period.

2. A monthly log of gallons of gasoline dispensed in the preceding month with a monthly calculation of the total gallons dispensed in the previous 12 months shall be kept on site.

3 A copy of the monthly log shall be submitted to the APCO at the time of annual permit renewal. The owner or operator shall certify that the log is accurate and true.

D Degreasing or Solvent-Using Unit

The owner or operator shall operate the degreasing or solvent-using unit(s) in compliance with the following requirements:

1. a If the solvents do not include methyl chloroform (1,1,1-trichloroethane), methylene chloride (dichloromethane), tetrachloroethylene (perchloroethylene), or trichloroethylene, no more than 5,400 gallons of any combination of solvent-containing materials and no more than 2,200 gallons of any one solvent-containing material shall be used in every 12-month period,.

   b. If the solvents include methyl chloroform (1,1,1-trichloroethane), methylene chloride (dichloromethane), tetrachloroethylene (perchloroethylene), or trichloroethylene, no more than 2,900 gallons of any combination of solvent-containing materials and no more than 1,200 gallons of any one solvent-containing material shall be used in every 12-month period.

2. A monthly log of amount and type of solvent used in the preceding month with a monthly calculation of the total gallons used in the previous 12 months shall be kept on site.

3. A copy of the monthly log shall be submitted to the APCO at the time of annual permit renewal. The owner or operator shall certify that the log is accurate and true.

E. Paint Spraying Unit[4]

The owner or operator shall operate the paint spraying unit(s) in compliance with the following requirements:

1. The total usage rate of all VOC-containing materials, including but not limited to, coatings, thinners, reducers, and cleanup solution shall not exceed _____ gallons in every 12-month period.

2. A monthly log of the gallons of VOC-containing materials used in the preceding month with a monthly calculation of the total gallons used in the previous 12 months shall be kept on site.

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[4]To be determined based on District SIP rules

3. A copy of the monthly log shall be submitted to the APCO at the time of annual permit renewal. The owner or operator shall certify that the log is accurate and true.

F. Diesel-Fueled Emergency Standby Engine(s) with Output Less Than 1,000 Brake Horsepower

[Depending on the District's federal ozone attainment status, the District will adopt either subsection 1.a 1.b, or 1.c below.]

The owner or operator shall operate the emergency standby engine(s) in compliance with the following requirements:

1. a. For a federal ozone area designation of attainment, unclassified, transitional, or moderate nonattainment, the emergency standby engine(s) shall not operate more than 5,200 hours in every 12-month period and shall not use more than 265,000 gallons of diesel fuel in every 12-month period.

   b. For a federal ozone nonattainment area classified as serious, the emergency standby engine(s) shall not operate more than 2,600 hours in every 12-month period and shall not use more than 133,000 gallons of diesel fuel in every 12-month period.

   c. For a federal ozone nonattainment area classified as severe, the emergency standby engine(s) shall not operate more than 1,300 hours in 12-month period and shall not use more than 66,000 gallons of diesel fuel in every 12-month period.

2. A monthly log of hours of operation, gallons of fuel used, and a monthly calculation of the total hours operated and gallons of fuel used in the previous 12 months shall be kept on site.

3. A copy of the monthly log shall be submitted to the APCO at the time of annual permit renewal. The owner or operator shall certify that the log is accurate and true.

6.2 The owner or operator of a stationary source subject to this rule shall obtain any necessary permits prior to commencing any physical or operational change or activity which will result in an exceedance of an applicable operational limit specified in section 6.1 above.

VIOLATIONS

Failure to comply with any of the applicable provisions of this rule shall constitute a violation of this rule. Each day during which a violation of this rule occurs is a separate offense.

A stationary source subject to this rule shall be subject to applicable federal requirements for a major source, including Rule ____ (District Title V rule) when the conditions specified in either subsections A or B below, occur:

A. Commencing on the first day following every 12-month period in which the stationary source exceeds a limit specified in section 3.1 above and any applicable alternative operational limit specified in section 6.1, above, or

B. Commencing on the first day following every 12-month period in which the owner or operator can not demonstrate that the stationary source is in compliance with the limits in section 3.1 above or any applicable alternative operational limit specified in section 6.1 above.

Attachment 3
November 2, 1994 Letter Describing Use of Minor NSR Programs

Mr. Jason Grumet
Executive Director, Northeast States
for Coordinated Air Use Management
129 Portland Street
Boston, Massachusetts 02114

Dear Mr. Grumet:

This is in response to Mr. Michael Bradley's March 22, 1994 letter to Mary Nichols seeking clarification of the Federal enforceability of State's existing minor new source review (NSR) programs. It is my understanding that some of the NESCAUM States are interested in using their existing minor NSR programs to limit a source's potential to emit so as to allow sources to legally avoid being considered a major source for title V purposes.

In my November 3, 1993 memorandum entitled "Approaches to Creating Federally-Enforceable Emission Limits," I described approaches that States could use to limit a source's potential to emit for title V purposes. While a number of approaches are acceptable, the Environmental Protection Agency (EPA) has promoted the use of State operating permits programs approved under sections 110 and 112(l), pursuant to the criteria set forth in the June 28, 1989 Federal Register. Among other things, these criteria include an opportunity for public and EPA review and require that permit conditions be practically enforceable. Several States have followed EPA's recommendation and have either adopted these requirements or are in the process of doing so.

The Agency recognizes the use of other approaches as well. In response to your question, EPA's position is that minor NSR permits issued under programs that have already been approved into the State implementation plan (SIP) are federally enforceable. Thus, EPA allows the use of federally-enforceable minor NSR permits to limit a source's potential to emit provided that the scope of a State's program allows for this and that the minor NSR permits are in fact enforceable as a practical matter.

Because minor NSR programs are essentially preconstruction review programs for new sources and modifications to existing sources, minor NSR programs can generally be used to limit a

source's potential emissions when such limits are taken in conjunction with a preconstruction permit action. In addition, please note that the term "modification" generally encompasses both physical changes and changes in the method of operation at an existing source (see Clean Air Act section 111(a)(4)). Thus, the scope of some, though not all, minor NSR programs is broad enough to be used to also limit a source's potential to emit for nonconstruction-related events. This occurs where the modification component of State programs extends to both physical changes and changes in the method of operation. In these cases, where a voluntary reduction in the method of operation (e.g., limit in hours of operation or production rate) by itself is considered a modification for minor NSR permitting, a source may reduce its hours of operation or production rate and make such a change federally enforceable through limits in its minor NSR permit.

Some States' minor NSR programs are written so as to preclude a source from limiting its potential to emit absent an increase in emissions. There may be other limitations on the scope of these programs as well. Since there is considerable variation among State minor NSR programs, a review of any individual State program would be necessary to determine its ability to limit a source's potential to emit. It may be beneficial for States to contact the appropriate EPA Regional Office if there are questions about the scope of the SIP-approved minor NSR program.

Minor NSR programs have generally been used in the past to limit a source's potential to emit for criteria pollutants. There is a growing need for sources to limit their potential to emit for toxic pollutants as well. The EPA is currently considering ways in which a State may limit the potential to emit of toxic pollutants, including possible uses of existing minor NSR programs. I plan to keep you and others aware of our efforts in this regard.

You should also be aware that a recent court ruling has called into question the Federal enforceability of a State minor NSR permit that does not meet the public participation requirements of current EPA regulations despite SIP approval of the State's program [see United States v. Marine Shale Processors, No. 90-1240 (E.D. La.) (bench ruling), June 15, 1994]. In that case involving extensive alleged violations of the permit terms, the court held that EPA could not enforce the terms of the minor NSR permit. The court subsequently ruled that the company could not rely on the permit to limit its potential to emit, and thus was liable for having failed to obtain a major

NSR permit. The outcome of this case suggests that States should proceed cautiously in relying on minor NSR programs to limit potential to emit where the program does not actually provide public participation.

In summary, EPA has provided guidance on approaches that are available to limit a source's potential to emit. The Agency recommends approaches that meet the criteria set forth in the June 28, 1989 Federal Register. Many States are taking action to adopt such programs. With respect to minor NSR permits, EPA believes that permits conditions issued in accordance with existing State minor NSR programs that have been approved into the SIP, and which are enforceable as a practical matter, are federally enforceable and can be used to limit potential to emit. Caution is advised, however, with respect to permits that do not meet procedural requirements. These programs are primarily preconstruction review programs although in many cases they can also limit a source's potential to emit in conjunction with operational changes.

As you have noted, title V issues are complicated and resource intensive. In order for the title V program to be successfully implemented, it is important that States and EPA work cooperatively in developing operating permits programs. Your comments and recommendations on program development issues are welcome.

We appreciate this opportunity to be of service and trust that this information will be helpful to you.

Sincerely

John S. Seitz
Director
Office of Air Quality Planning
and Standards

cc: Air Division Director, Regions I-X

Attachment 4
January 25, 1995 Guidance on Practicable Enforceability

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON. D.C. 20460

JAN 25 1995

OFFICE OF
ENFORCEMENT AND
COMPLIANCE ASSURANCE

SUBJECT: Guidance an Enforceability Requirements for Limiting Potential to Emit through SIP and §112 Rules and General Permits

FROM: Kathie A. Stein, Director
Air Enforcement. Division

TO: Director, Air and, Pesticides and Toxics Management Division, Regions I and IV
Director, Air and Waste Management Division, Region II
Director, Air, Radiation and Toxics Division, Region III
Director, Air and Radiation Division, Region V
Director, Air, Pesticides and Toxics Division, Region VI
Director, Air and Toxics Division, Regions VII, VIII, IX, and X

Attached is a guidance document developed over the past year by the former Stationary Source compliance Division in coordination with the Air Enforcement Division, Office of Air Quality Planning and Standards$ OAR's Office of Policy Analysis and Review, and the Office of General Counsel, as well-as with significant input from several Regions.

A number of permitting authorities have begun discussions with or have submitted programs for review by EPA that would provide alternative mechanisms for limiting potential to emit Several authorities have submitted SIP rules and at least one State has been developing a state general permit approach.; We believe that this guidance is important to assist the EPA Regions as well as States in approving and developing such approaches.

For additional information regarding this guidance, please contact me or Clara Poffenberger of my staff at (202) 564-8709.

cc: John Rasnic, Director
Manufacturing, Energy, and Transportation Division Office of Compliance

Air Branch Chiefs, Regions I -X

Enforceability Requirements for Limiting potential to Emit Through SIP and §112 Rules and General Permits

Introduction

As several EPA guidance describe, there are several mechanisms available for sources to limit potential to emit. EPA guidance have also describe the importance of practical enforceability or the means used to limit the Potential to Emit. This guidance is intended to provide additional guidance on practical enforceability for such limits. We provide references for guidance an practical enforceability for permits and rules in general and provide guidance in this document for application of the same principles to "limitations established by rule or general permit," as described in the guidance document issued January 25, 1995, entitled "Options for Limiting Potential to Emit (PTE) of a Stationary Source under section 112 and Title V of the Clean Air Act (Act)." The description is as follows:

> Limitations established by rules. For less complex plant sites, and for source categories involving relatively few operations that are similar in nature, case-by-case permitting may not be the most administratively efficient approach to establishing federally enforceable restrictions. One approach that has been used is to establish a general rule which creates federally enforceable restrictions at one time for many sources (these rules have been referred to as "prohibitory" or "exclusionary" rules). The concept of exclusionary rules is described in detail in the November 3, 1993 memorandum ["Approaches to Creating Federally Enforceable Emissions Limits," from John S. Seitz]. A specific suggested approach for VOC limits by rule was described in EPA's memorandum dated October 15, 1993 entitled "Guidance for State Rules for Optional Federally Enforceable Emissions Limits Base Upon Volatile Organic Compound (VOC) Use." An example of such an exclusionary rule is a model rule developed for use in California. (The California model rule is attached, along with a discussion of its applicability to other situations - see Attachment 2). Exclusionary rules are included in a State's SIP or 112 program and generally become effective upon approval by the EPA.

The EPA prefers the term "exclusionary rule" in that this phrase is a less ambiguous description of the overall purpose of these rules.

General permits -A concept similar to the exclusionary rule is the establishment Of a general permit for a given source type. A general permit is a single permit that establishes terms and conditions that must be complied with by all sources subject to that permit. The establishment of a general permit could provide for emission limitations in a one-time permitting process, and thus avoid the need to issue separate permits for each source. Although this concept is generally thought of as an element of Title V permit programs there in no reason that a state or local agency could not submit a general permit program as a SIP submittal Aimed at creating synthetic minor sources. Additionally FESOP [Federally Enforceable State Operating Permit usually reffering to Title I State OperatingPermit Programs approved under- the criteria established by EPA in the June 28, 1989 Federal Register notice, 54 FR 27274] programs can include general permits as an element of the FESOP program being approved into the SIP. The advantage of a SIP general permit, when compared to an exclusionary rule, is that upon approval by the EPA of the state's general permit program, a general permit could be written for an additional source type without triggering the need for the formal SIP revision process. (January 25, 1995 Seitz and Van Heuvelen memorandum, page 4.)

SIP or §112 Rules

Source-category standards 'approved in the. SIP. or under 112,if enforceable as a. practical matter, can be used as federally enforceable limits on potential to emit. Such provisions require public participation and EPA review. Once a specific source qualifies under the applicability requirements of the source category rule, additional public participation is not required to make the limits federally enforceable as a matter of legal sufficiency since the rule itself underwent public participation and EPA review. The rule must still be enforceable as practical matter in order to be considered federally enforceable. A source that violates this type of rule limiting potential to emit below major a source thresholds or is later determined not to qualify for coverage under the rule, could be subject to enforcement action for violation of the rule and for constructing or operating without a proper permit (a. part 70, a New Source Review permit, or operating without meeting §112 requirements, or any combination thereof).

General Permits

The title V regulations set out provisions for general permits covering numerous similar sources. The primary purpose of general permits is to provide a permitting alternative where

the normal permitting process would be overly burdensome, such as for area sources under section 112. General permits may be issued to cover any category of numerous similar sources, including major sources, provided that such sources meet certain criteria laid out in 40 CFR part 70. Sources may be issued general permits strictly for the purpose of avoiding classification as major source. in other words, general permits may be used to limit the potential to emit for numerous similar sources. However, general permits must also most both legal and practical federal enforceable requirements.

With respect to legal sufficiency, the operating permit regulations provide that once the general permit has been issued, after opportunity for public participation and, EPA and affected State review, the permitting authority may grant or deny a sources request to be covered by a general permit without further public participation or EPA or affected State review. The action of granting or denying the source's request is not subject to judicial review. A general permit does not carry a permit shield. A source may be subject to enforcement action for operating without a part 70 permit if the source is later determined not to qualify for coverage under the general permit. Sources covered by general permits must comply with all part 70 requirements.

State SIP or 112(l) General Permits

Another mechanism available to limit potential to emit is a general permit program approved into the SIP or under section 112(1), the hazardous air pollutant program authority. This mechanism allows permitting authorities to issue and revise general permits consistent with SIP or 112(1) program requirements without going through the SIP or 112(1) approval process for each general permit or revision of a general permit. The program is also separate from title V, like Title I state operating permits, and issuance and revisions of the permits are to comply with title V procedures.

Once a program is approved, issuing and revising general permits should be significantly less burdensome and time-consuming for State legislative and rulemaking authorities. The EPA review should also be less burdensome and time-consuming. After a program is approved, permitting authorities have the flexibility to submit and issue general permits as needed rather than submitting them all at once as part of a SIP submittal. Given the reduced procedural burden, permitting authorities should be able to issue general permits to small groups or categories or sources rather than attempt to cover broad categories with a generic rule. We anticipate that specific permit requirements or general permits may be readily developed with the assistance of interested industry groups.

The state general permit approach may allow sources to meet the federal the federal enforceability requirements more easily than other approaches. However, to use this approach, states must have a federally enforceable program that provides the state the authority, to issue such permits; to accomplish this, EPA must approve the program into the SIP or pursuant to section. 112(1) of the Clean Air Act.

Enforceability Principles

In 1989, in response to challenges from the Chemical Manufacturers Association and other industry groups, EPA reiterated its position that controls and limitations used to limit a source's Potential to emit must be federally enforceable. See 54 FR 27274 (June 28, 1989). Federally enforceable limits can be established by Clean Air Act programs such as NSPS, NESHAPs, MACTs, and SIP requirements. However, source-specific limits are generally set forth in permits. Generally, to be considered federally enforceable, the permitting program must be approved by EPA into the SIP and include provisions for public participation. "In addition, permit terms and conditions must be practicably enforceable to be considered federally enforceable. EPA provided specific guidance on federally enforceable permit conditions in a June 13, 1989 policy memo “Limiting Potential to Emit in New Source Permitting” from John Seitz and in the June 28, 1989 Federal Register notice (54 FR 27274) Additional guidance Can also be found in United states v. Louisiana Pacific,682 F. Supp 1122 (D. Colo. 1987) 682 F. Supp 1141 (D. Colo.1988), which led to these guidance statements and a number of other memoranda covering practicable enforceability as it relates to rolling averages, short-term averages, and emission caps. See “Use of Long Term Rolling Averages to Limit Potential to Emit,” form John. B. Rasnic to David Kee, February 24, 1992; “Limiting Potential to Emit;” from Mamie Miller to George Czerniak, August, 1992; “Policy Determination an Limiting Potential to Emit for Koch Refining Company's Clean Fuels Project", from John B. Rasnic to David Kee, March 13, 1992; and “3M Tape Manufacturing Division Plant, St. Paul, Minnesota” from. John B. Rasnic to David Kee, July 14, 1992.

In 1987, EPA laid out enforceability criteria that SIP rules must meet. see “Review of State Implementation Plans and Revisions for Enforceability and Legal Sufficiency,” from Michael Alushin, Alan Eckert, and John Seitz, September 3, 1987 (1997 SIP memo). The criteria include clear statements as to applicability, specificity as to the standard that must be met, explicit statements of the compliance time frames (e.g. hourly, daily, monthly, or 12-month averages, etc.), that the time frame and method of compliance employed must be sufficient to protect the standard involved, record keeping requirements must be specified, and equivalency provisions must meet certain requirements.

Based an these precedents this guidance describes six enforceability criteria which a rule or a general permit must meet to make limits enforceable as a practical matter. In general, practical enforceability for a source-specific permit term means that the provision must specify (1) a technically accurate limitation and the portions of the source subject to the limitation; (2) the time period for the limitation (hourly, daily, monthly, annually); and (3) the method to determine compliance including appropriate monitoring, record keeping and reporting. For rules and general permits that apply to categories of sources, practical enforceability additionally requires that the provision (4) identify the categories of sources that are covered by the rule; (5) where coverage is optional, provide for notice to the permitting authority of the source’s election to be covered by the rule; and (6) recognize the enforcement consequences relevant to the rule.

This guidance will address requirements (4) "arid (5) first as they are concepts that are unique to rules and general' permits.

A. Specific Applicability

Rules and general permits designed to limit potential to emit must be specific as to the emission units or sources covered by the rule or permit. In other words, the rule or permit must clearly identify the category(ies) of the sources that qualify for the rule's coverage. The rule must apply to categories of sources that are defined specifically or narrowly enough so that specific limits and compliance monitoring can be identified and achieved by all sources in the categories defined.

A rule or general permit that covers, a homogeneous group of sources should allow standards to be set that limit potential to emit and provide the specific monitoring requirements. (Monitoring is more fully addressed in section D.) The State can allow for generic control efficiencies where technically sound and appropriate, depending on the extent of the application and ability to monitor compliance with resultant emission limits. Similarly, specific and narrow applicability may allow generic material usage or limits on hours of operation to be sufficient. For example, a rule or general permit that applies to fossil fuel fired boilers of a certain size may allow for limits on material usage, such as fuel-type and quantity. A rule or general permit that applies, only to standby diesel generators or emergency generators may allow restrictions on hours of operation to limit potential to emit. The necessary compliance terms (i.e., monitoring or record keeping) associated with any of these limits, such as with hours of operation, can readily be specified in the rule or the general permit itself.

General permits under Title V are assumed to include this

enforceability principle because the Part 70 regulations set out specific criteria that states should consider in developing their general permit provisions (See 57 FR 32278). These factors include requirements that

> "categories of sources covered by general permits should be generally homogenous in terms of operations, processes, and emissions. All sources in the category should have essentially similar operations or processes and emit pollutants with similar characteristics."

Another factor stated is "sources should be subject to the same or substantially similar requirements governing operation, emissions, monitoring, reporting, or record keeping." Examples of source categories appropriate for general permits include: degreasers, dry cleaners, small heating systems, sheet fed printers, and VOC storage tanks (see 57 FR 32278).

B. Reporting or Notice to Permitting Authority

The rule or general permit should provide specific reporting requirements as part of the compliance method. Although the compliance method for all sources must include record keeping requirements, the permitting authority may make a determination that reporting requirements for small sources would provide minimal additional compliance assurance. Where ongoing reporting requirements are determined not to be reasonable for a category of sources, the rule or general permit should still provide that the source notify the permitting authority of its coverage by the rule or the permit. In the limited situation where all the sources described in a source category are required to comply with the all of the provisions of a rule or general permit, notice is not needed. However, where there are no reporting requirement's and no opt-in provisions, the permitting authority must provide the public with the names and locations of sources subject to the rule or permit.

For Title V general permits, Part 70 requires sources to submit an application for a general permit which must be approved or disapproved by the permitting authority. For SIP or §112 rules and SIP or §112 general permits, in response to receiving the notice or application, the permitting authority may issue an individual permit, or alternatively, a letter or certification. The permitting authority may also determine initially whether it will issue a response for each individual application or notice, and may initially specify a reasonable time period after which a source that has submitted an application or notice will be deemed to be authorized, to operate under the general permit or SIP or §112 rule.

C. Specific Technically Accurate Limits

The rule or general permit issued pursuant to the SIP or §112 must specify technically accurate limits on the potential to emit. The rule or general permit must clearly specify the limits that apply, and include the specific associated compliance monitoring. (The compliance monitoring requirements are discussed further in the next section.) The standards or limits must be technically specific and accurate to limit potential to emit, identifying any allowed deviations.

The 1987 policy on SIP enforceability states that limitations “must be sufficiently specific so that a source is fairly on notice as to the standard it must meet.” For example, “alternative equivalent technique” provisions should not be approved without clarification concerning the time period over which equivalency is measured as wall as whether the equivalency applies on a per source or per line basis or is facility-wide.

Further, for potential to emit limitations, the standards set must be technically sufficient to provide assurance to EPA and the public that they actually represent a limitation on the potential to emit for the category of sources identified. Any presumption for control efficiency must be technically accurate and the rule must provide the specific parameters as enforceable limits to assure that the control efficiency will be met. For example, rules setting presumptive efficiencies for incineration controls applied to a specific or broad category must state the operating temperature limits or range, the air flow, or any other parameters that may affect the efficiency on which the presumptive efficiency is based. Similarly, material usage limits such as fuel limits, as stated above, require specifying the type of fuel and may require specifying other operating parameters.

A rule that allows sources to submit the specific parameters and associated limits to be monitored may not be enforceable because the rule itself does not set specific technical limits. The submission of these voluntarily accepted limits on parameters or monitoring requirements would need to be federally enforceable. Absent a source-specific permit and appropriate review and public participation of the limits, such a rule is not consistent with the EPA's enforceability principles.

D. Specific compliance Monitoring

The rule must specify the methods to determine compliance. Specifically, the rule must state the monitoring requirements, record keeping requirements, reporting requirements, and test methods as appropriate for each potential to emit limitation; and clarity which methods are used for making a direct determination of compliance with the potential to emit limitations.

“Monitoring” refers to many different types of data collection, including continuous emission or opacity monitoring, and measurements of various of Parameters of process or control devices (e.g. temperature, pressure drop, fuel usage) and record keeping of parameters that been limited ,such as hours of operation, production levels, or raw material usage. Without a verifiable plantwide, verifiable emission limits must assigned to each unit or group of units subject to the subject to he rule or general permit. Where monitoring cannot be used to determine emissions directly, limits on appropriate operating parameters must be established for the units or source, and must the monitoring must be sufficient to yield data form the relevant time period that is representative of the source’s compliance with the standard or limit. Continuous emissions monitoring, especially in the case of smaller sources, is not required.

E. Practicably Enforceable Averaging Times

The averaging time for all limits must be practicably enforceable. In other words, the averaging time period must readily allow for determination of compliance. EPA policy expresses a preference toward short term limits, generally daily but not to exceed one month. However, EPA policy allows for rolling limits not to exceed 12 months or 365 days where the permitting authority finds that the limit provides an assurance that compliance can be readily determined and verified. See June 13, 1989 “Guidance on Limiting Potential to Emit," February 24, 1992 memorandum "Use of Long Term Rolling Averages to Limit Potential to Emit” from John Rasnic to David Kee and March 13 1992 "Policy Determination on Limiting Potential to Emit for Koch Refining Company Clean Fuels Project” from John B. Rasnic to David Kee, stating that determinations to allow an annual rolling average versus a shorter term limit must be made on a case by case basis. Various, factors weigh in favor of allowing a long term rolling average, such as historically unpredictable emissions. Other factors may weigh in favor of shorter term limit, such as the inability to set interim limits during the first year. The permitting agency must make a determination as to what monitoring and averaging period is warranted for the particular source-category in light of how close the allowable emissions would be to the applicability threshold.

F. Clearly Recognized Enforcement

Violations of limits imposed by the rule or general permit that limit potential to emit constitute violations of major source requirements. In other words the source would be violating a “synthetic minor” requirement which may result in the source being treated as a major source under Titles I and V. The 1989 Federal Register Notice provides for separate enforcement

and permitting treatment depending on whether the source subsequently chooses to become a major or remain minor. Thus violations of the rule or general permit or violation of the specific conditions of the rule or general permit subjects the source to potential enforcement under the Clean Air Act and state law. The operating permit rule states that not withstanding the shield provisions of part 70, the source subject to a general permit may be subject to enforcement action for operating without a part 70 permit if the source is later determined not to qualify or the conditions and terms of the general permit. Moreover, violation of any of the conditions of the rule or general permit may result in a different determination of the source's potential to emit and thus may subject the source to major requirements and to enforcement action for failure to comply with major source requirements from the initial determination.

G. Rule Requirements for State General Permit Programs

As discussed above, general permit programs must be submitted to EPA for approval under SIP authority or under section 112(1), or both, depending on its particular pollutant application. SIP and §112(1) approval and rulemaking procedures must be met, including public notice and comment. The specific application of the enforceability principles for establishing State SIP or §112(1) general permit programs require that the rule establishing the program set out these principles as rule requirements. In other words, these principles must be specific rule requirements to be met by each general permit.

The rule establishing the program must require that (1)general permits apply to a specific and narrow category of sources; (2) sources electing coverage under general permits where coverage is not mandatory, provide notice or reporting to the permitting authority; (3) general permits provide specific and technically accurate(verifiable) limits that restrict the potential to emit; (4) general permits contain specific compliance requirements; (5) Limits in general permits are established based on practicably enforceable averaging times; and (6) violations of the permit are considered violations of the state and federal requirements and result in the source being subject to major source requirements.

In addition, since the rule establishing the program does not provide the specific standards to be met by the source, each general permit, but not each application under each general permit, must be issued pursuant to public and EPA notice and comment. The 1989 Federal Register notice covering enforceability of operating permits requires that SIP operating permit programs issue permits pursuant to public and EPA notice and comment. Title V requires that permits, including general permits, be issued subject to EPA objection.

Finally, sources remain liable or compliance with major source requirements if the specific application of a general permit to the source does not limit the source's potential to emit below major source or major modification thresholds. (The limits provided in these mechanisms may actually limit the potential to emit of sources but may not limit the potential to emit for some sources to below the threshold necessary to avoid major source requirements. For example, a general permit for industrial boilers may in fact provide limits that are sufficient to bring a source with only two or three boilers to below the subject thresholds but a source with more than three boilers may have a limited PTE but not limited below the major source threshold.) Also, where the source is required to use another mechanism to limit potential to emit, i.e., a construction permit, the general permit may not be relied upon by the source or the State, to limit potential to emit.

Permits issued pursuant to the approved program, meeting the above requirements, are adequate to provide federally enforceable limits on potential to emit for New Source Review, title V, and §112 programs as long as they are approved pursuant to SIP (section 110) and section 112(1) authorities.

Attachment 5
Example Language for Affirming Limits

[Note: the following language is taken from the Thursday December 17, 1992 Federal Register, page 59931. To place this excerpt into context, readers are encouraged to obtain the entire Federal Register notice]

> "The USEPA today finds the existing Illinois SIP regulations to be consistent with federal requirements. If the State followed its own procedures, each permit issued under this regulation was subject to public notice and prior USEPA review. Therefore, USEPA will consider all operating permits issued which were processed in a manner consistent with both the State regulations and the five criteria to be federally enforceable with the promulgation of this rule provided that any permits that the State wishes to make federally enforceable are submitted to USEPA and accompanied by documentation that the procedures approved today have been followed. USEPA will expeditiously review any individual permits so submitted to ensure their conformity to the program requirements."

Phone conversation notes:

With: Steve Pak, USEPA

Date: 01/21/93

Re: Rolling averages

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asked Steve what USEPA's policy is on allowing 12 month rolling averages for recordkeeping. He said that USEPA will always accept month by month, and 365 day rolling averages. The rolling 12 month averages will be accepted if it can be demonstrated that production is unpredictable and substantially changes month to month. He gave the example of a standby generator. Since operation is on an occasional use USEPA will accept 12 month rolling averages. I asked him if the company did not know which month they will shutdown will 12 month rolling averages be OK. He said yes. The main reason to allow 12 month rolling averages is if the company can prove that production is unpredictable and the changes on a month to month basis is substantial. Steve said that even though USEPA will accept 12 month rolling averages, they would prefer month by month or 365 day rolling averages.

M. Hopkins

cc: Jim Braun, DAPC
Dave Newsad, CDO

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

MAR 13 1992

OFFICE OF
AIR AND RADIATION

MEMORANDUM

SUBJECT: Policy Determination on Limiting Potential to Emit for Koch Refining Company's Clean Fuels Project

FROM: John B. Rasnic, Director
Stationary Source Compliance Division
Office of Air Quality Planning and Standards

TO: David Kee, Director
Air and Radiation Division
Region V

This is in response to your memorandum dated January 24, 1992. As stated in your memorandum, the Koch Refining Company in Rosemount, Minnesota, has submitted a permit application for their Clean Fuels Project (CFP) to the Minnesota Pollution Control Agency. In addition, Koch is attempting to correct deficiencies in its refinery expansion. In order to limit potential emissions from these projects, Koch would like to have policy determinations made for several issues regarding the June 13, 1989, memorandum "Guidance on Limiting the Potential to Emit in New Source Permitting" signed by Terrell Hunt and John Seitz.

Koch specifically requests whether the following conditions could be used to limit their potential to emit to below major modification thresholds: bubble all process heater emissions for the existing heaters, take a federally enforceable emission limit on the heaters, use an averaging period of 365 consecutive days which are rolled daily for the heaters, bubble all VOC emissions for its storage tanks in the refinery tank farm, and take a federally enforceable emission limit for storage tanks.

With regard to the bubble for the 59 heaters, your memorandum states that due to fuel use variability dictated by the refinery and individual heater operating conditions, Koch wishes to bubble the emissions from the heaters. The permits will require continuous flow monitors on individual heaters, and historical records have shown usage variability in the distribution system. The individual fuel monitors will allow for the overall emissions calculation to be made. As indicated to us in your memorandum, historical records show that individual limits reflecting the individual operating need for each of the heaters would be difficult to develop. Thus, a bubble for the 59 heaters may be reasonable. However, the bubble need only be granted to the

extent that it facilitate enforceability of the limits applied. Also, the decision whether to grant a bubble should consider the bubble's impact on our ability to evaluate whether any future physical or operational changes at the heaters should be subject to NSR.

Taking an emission cap to limit potential to emit is restricted by the June 13, 1989 guidance. The guidance states that "the particular circumstances of some individual sources make it difficult to state operating parameters for control equipment limits in a manner that is easily enforceable as a practical matter. The guidance lays out two examples that would be exceptions to the prohibition on using emission limits to restrict potential to emit. As is expressed in your memorandum, the particular circumstances of Koch refinery make it difficult to state operating parameters in a manner that is easily enforceable as a practical matter. In fact, what is described as the "VOC exception" in the 1989 guidance applies in principle to sulfur dioxide (SO2) emissions for the process heaters burning refinery gas. For these heaters, no add-on control equipment is used, but rather several parameters are used to determine a mass emission rate.

However, in accordance with the 1989 potential to emit policy, when an emission limit is taken to restrict potential to emit, some type of continuous monitoring of compliance with that emission limit is required. In the case Of SO2 emissions, the application of continuous emission monitors (CEMS) should be explored. The use of a CEM equivalent may also be acceptable given that it provides a continuous assessment of emissions that is at least as reliable as a CEM. The appropriate means for monitoring or calculating emissions must be determined on a case by case basis by the permitting authority. Use of an emission limit to restrict potential to emit SO2 at the refinery heaters, which are served by a common fuel line, is acceptable provided that emissions can be and are required to be readily and periodically determined or calculated. The continuous monitoring method described in your memorandum includes analyzing the sulfur content of the oil in the tank on a daily basis and measuring the oil used with continuous flow monitors as well as monitoring fuel usage at each heater as well as meeting a specified H2S content.

With respect to an acceptable averaging time for limiting potential to emit, the section in the June 1989 guidance entitled "Time Periods for Limiting Production and Operation" allows for averaging periods of 365 consecutive days which are rolled daily. This allows for short term enforceability of production or operation limits while allowing for long term data to be considered. When a long term average is used, we believe that it is reasonable to require permit conditions which provide for interim limits that ensure compliance and enforceability during the

first year. The method used to provide interim limits and the need to do so should be determined on a case by case basis, considering how close the allowable emissions would be to the applicability threshold, and how closely the enforcing agency believes monitoring is warranted for the particular source. Determinations whether to allow an annual rolling average versus a shorter term limit must also be made on a case by case basis. Various factors may weigh in favor of allowing a long term rolling average.

From discussions with your staff, we understand that Koch Refinery has historic unpredictable variations in their emissions. Use of a 365 day rolling average in this case may therefore be warranted. However, other facts not presented to us may weigh in favor of a shorter limit. Yet, your indication that Koch Refinery may be willing to use emission data for the year prior to start-up of the heaters, to provide interim enforceable limits for the first year of their potential to emit limitation, weighs in favor of allowing a 365 day rolling average. This approach allows the limits to become enforceable on the first day of operations.

With regard to setting an overall limit for the storage tanks in the refinery tank farm, although throughput to individual tanks in the tank farm is closely monitored for business purposes, it is argued that throughput limitations for particular tanks are infeasible as they would defeat the purpose of the tank as a temporary holding vessel. The tank farm consists of over 150 tanks. These tanks would also hold a variety of products. The annual throughput for a particular product will depend on the market demand and refinery capacity. Given the need for variability in the operation of these tanks, an overall limit for the tank farm, as opposed to individual limits for tanks, appears warranted. Discussions with your staff and Minnesota Pollution Control Agency have indicated that even with a bubble over the tanks in the tank farm, modifications affecting emissions in the tank farm could be detected.

With respect to Koch's request to use an emission limit rather than production or operation limits for the tank farm, as stated for the heaters, some type of continuous monitoring is required. Since a CEM is not feasible for monitoring VOC emissions, the permit must require a continuous assessment of emissions that is at least as reliable as a CEM. The appropriate means for continually assessing emissions must be determined on a case by case basis by the permitting authority. Your memorandum states that CEMs would not be used to directly determine compliance with a VOC emission limit because none are available for this application. Compliance would instead be determined daily based on product density and volatility, product throughput per tank, and control efficiency per tank. We believe that if the source is willing to monitor and

determine compliance daily, then the source could be allowed to use an emission cap to limit potential to emit. Otherwise, the maximum usage of the tank (both in volume and volatility) must be assumed in determining potential to emit.

Our response is based on the facts presented in your memorandum of January 24, 1992. This response does not reflect EPA's position with regard to deficiencies from the 1985 expansion. This response does not constitute or imply a final decision with regard to enforcement or the legality of the 1985 expansion.

If you have any questions concerning our response, please contact Clara Poffenberger at FTS 678-8709.

cc: Gary McCutchen, NSR Section, AQMD (MD-15)
William L. MacDowell, Region V
Ron VanMersbergen, Region V
Rachel Rinehart, Region V
Karen Schapiro, AED
Julie Domike, AED
Jeffrey Renton, OGC

u3-5

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 2046
FEB 24, 1992

OFFICE OF
AIR AND RADIATION

MEMORANDUM

SUBJECT: Use of Long Term Rolling Averages to Limit Potential to Emit

FROM: John B. Rasnic, Director
Stationary Source Compliance Division
Office of Air Quality Planning and Standards

TO: David Kee, Director
Air and Radiation Division
Region V

This is in response to your memorandum dated September 17, 1991 and several other recent requests for clarification of the guidance entitled "Limiting Potential to Emit in New Source Permitting" (signed by Terrel Hunt and John Seitz, dated June 13, 1989). My staff met with your staff on these issues in October, 1991, and in response has surveyed the Regional offices for any additional suggestions for clarification of the policy. It was our understanding last fall that a direct response to your September memorandum would not be responsive to your needs. However, we have since determined that guidance on application of the "Potential to Emit Policy" to the nine source categories listed in your September 17 memorandum is warranted. To that end, this memorandum gives guidelines for determination of whether to allow long term rolling averages for the nine source categories.

Our survey of the Regions helped us to formulate our response regarding the nine source categories. As we have stated before, we believe that each case in which a source seeks to restrict its potential to emit by imposition of long-term production limits (i.e., limits that exceed one month) must be independently evaluated. Therefore, the facts of a specific case may lead to a different response, and the availability of a 12 month rolling average for the nine listed sources is not automatic. As you know, the potential to emit policy allows use of long-term rolling averages in any case where a source experiences "substantial and unpredictable" annual variations in production. Thus, it is the burden of the source to demonstrate the need for flexibility. In no event shall a source be allowed longer than an annual average rolled less frequently than a month.

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General responses regarding the acceptability of long term averages for the nine source categories follows:

1. Agricultural production such as harvesting or food processing where part of a year the equipment is idle (sugar beet processing facilities).

Rolling averages have been allowed for seasonal food processors. 365 day rolling averages are appropriate given the uncertainties of operating schedules. Each case should be examined, however, for predictability, and alternative limits may be set that would not be as long as an annual rolling average. One option would be requiring a monthly production limit of zero for the off months, and a higher limit for the operating months.

2. Asphalt manufacturing in northern latitudes when there is no winter demand.

Units for which normal operating rates vary greatly (e.g., seasonal processes or batch mode operations) may be allowed longer averaging times. Such sources may be requested to document the historic unpredictability of their operations. Some regions do allow for longer averages where seasonal variations or climatological conditions affect the operation of the source. Any seasonal variations should be examined for predictability, and alternative limits may be set without using a longer averaging period. Again one option would be requiring a low production limit in the winter and higher production levels in the summer.

3. Emergency standby units.

This is a good example of a source that would qualify for a long term average. An emergency standby unit is the classic example of unpredictability.

4. Limit on oil usage in a boiler which can accommodate oil and natural gas but is on interruptable status during winter (commercial or institutional boilers).

Typically, this type of source may qualify for a longer rolling average. However, each case must be examined for predictability and it is recommended that sources demonstrate a history of unpredictable variations.

5. A printing press which has a surge in demand for Christmas season greeting cards.

Generally, this type of source may be able to predict such a seasonal increase in demand. However, if the source is able to demonstrate historical substantial unpredictability, it may be allowed a rolling average. You may also consider requiring a

monthly average with higher monthly production/operation in the busy season than in the off season, such that annual emissions are still below the applicability threshold.

6. Quarrying or mining activities which may be interrupted by winter weather.

Generally, this type of activity allows for use of a long term rolling average, unless it is determined that such interruptions are predictable.

7. Plants where there may be variations in production due to unpredictable orders or contracts.

Proof of historic substantial unpredictability should be provided to justify a long term rolling average.

8. Units used occasionally for testing new products or experimentation.

Generally, rolling averages may be allowed for this type of source. But again, this depends on the definition of "occasionally" for an individual plant.

9. Natural gas pipeline compressor stations with load variations depending on the seasonal variations in fuel demand in different parts of the network.

Unpredictable seasonable variations due to climatological conditions may very well support use of a long term rolling average.

When a determination is made that a rolling average is warranted due to substantial and unpredictable variation in production, the question of enforceability must be addressed. As we have discussed, a 365 day rolling average allows for short term enforceability of production or operation limits while allowing for long term data to be considered. When such a long term average is used, we believe that it is reasonable to require permit conditions which provide for interim limits that ensure compliance and enforceability during the first year. The method used to provide interim limits and the need to do so should be determined on a case by case basis, considering how close the allowable emissions would be to the applicability threshold, and how close the enforcing agency believes monitoring is warranted for the particular source. You have indicated to us that some sources have suggested taking a requirement in the permit to use available data from the past year to average at the start of operations. This may weigh in favor of allowing a 365 day rolling average.

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In response to your broader request for additional examples of how to apply the Potential to Emit Policy, we hope to discuss this issue at our annual NSR workshop. Our initial contact with other Regions indicated that the policy is adequate and allows sufficient flexibility for the permitting authority.

If you have any questions concerning our response, please contact Clara Poffenberger at FTS 678-8709.

cc:
Gary McCutchen, NSR Section, AQMD (MD-15)
William L. MacDowell, Region V
Ron VanMersbergen, Region V
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JUL 0 1 1991

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
230 SOUTH DEARBORN ST.
CHICAGO, ILLINOIS 60604

JUN 25 1991

REPLY TO ATTENTION OF:
(5AE-26)

Robert Hodanbosi, Manager
Air Quality Model and Planning Section
Division of Air Pollution Control
Ohio Environmental Protection Agency
1800 WaterMark Drive
P.O. Box 1049
Columbus, Ohio 43266-0149

Dear Mr. Hodanbosi:

The United States Environmental Protection Agency (USEPA) reviewed the information submitted by USS Kobe in its memorandum dated May 17, 1991, in support of its desire for a 12-month rolling average in computing emissions from its Number 3 Blast Furnace and associated facilities. The company claims the source has substantial and unpredictable variations in production and, therefore, qualifies for a 12-month rolling average.

USEPA's policy memorandum entitled "Guidance on Limiting Potential to Emit in New Source Permitting", dated June 13, 1989, states that in some rare situations where there is substantial and unpredictable annual variation in production, such as the operation of an emergency boiler, a rolling limit longer than a month can be justified. The arguments submitted by USS Kobe suggest that: 1) state of the economy, 2) fluctuation in customer demand, 3) plant layoffs, 4) labor strikes, 5) collapse in product markets, and 6) change in plant ownership, are appropriate bases for justifying longer use of such longer rolling averages. We disagree. These kinds of conditions are faced by nearly all industries from time to time. USS Kobe has not demonstrated that it is more susceptible than most industries to variations in production due to these conditions.

We do not believe USS Kobe's case to be a rare situation and the company has not established that its production variations are unique. To open this exemption to broad applicability would be counter to the intent of the policy. Therefore, the company should not be allowed to use a 12-month rolling average to limit its potential to emit and thus avoid review as a major modification.

If you have any questions concerning this matter, please call me at (312) 886-6798.

Sincerely yours,

William L MacDowell

William MacDowell, Chief
Regulation Development Section
Air Enforcement Branch

Printed on Recycled Paper

WASHINGTON, D.C. 20460

EC-6-1998-66

JUN 13 1989

MEMORANDUM

SUBJECT: Guidance on Limiting Potential to Emit in New Source Permitting

FROM: Terrell E. Hunt
Associate Enforcement Counsel
Air Enforcement Division
Office of Enforcement and Compliance Monitoring

John S. Seitz, Director
Stationary Source Compliance Division
Office of Air Quality Planning and Standards

TO: Addressees

This memorandum transmits the final guidance on conditions in construction permits which can legally limit a source's potential to emit to minor or de minimis levels. We received many helpful comments on the January 24, 1989 draft of this guidance, and have incorporated the comments into the final document wherever possible. A summary of the major changes which have been made to the guidance in response to these comments is provided below.

Several commenters noted that the draft guidance used the term "federally enforceable" to mean both federally enforceable as defined in the new source regulations (40 C.F.R. §§ 52.21(b)(17), 51.165(a)(1)(xiv), 51.166(b)(17)), and enforceable as a practical matter. We have tried to distinguish the places where each term should be used, explained the relationship between the two terms, and indicated that in order to properly restrict potential to emit, limitations must be both federally enforceable as defined in the regulations and practically enforceable.

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Some commenters requested that the section on averaging times for production limits be more specific as to when it is appropriate to use limitations which exceed a one month time basis. We have tried to explain why it is not possible to develop generic criteria for making this distinction, and to indicate situations where exceptions to the policy that production and operation limitations not exceed one month may be warranted.

There were some requests for a section on enforcement. We have included a new Section VI which addresses this topic. We also received many good suggestions on the example permit limitations. The section on examples has been substantially reworked to reflect your comments.

Finally, we learned through the comments that in two specific circumstances, short term emission limits are the most useful and reasonable way to restrict and verify limits on potential to emit. These circumstances are: 1) when control equipment is installed but control equipment operating parameters are difficult to measure during enforcement inspections; and 2) in surface coating operations with numerous and unpredictable use of coatings containing varying VOC content, where add-on control equipment is not employed. Therefore, we have made a narrow exception to the flat prohibition on use of emission limits to restrict potential to emit for these specific circumstances, and only when certain additional conditions have been met.

Again, we appreciate the thoughtful comments we have received on this guidance. Please insert this document into your Clean Air Act Compliance/Enforcement Policy Compendium as Item Number H.3. If you have any questions, please contact Judith Katz in the Air Enforcement Division at FTS 382-2843, or Sally Farrell in the Stationary Source Compliance Division at FTS 382-2875.

Addressees:

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LIMITING POTENTIAL TO EMIT IN NEW SOURCE PERMITTING

JUNE 13, 1989

AIR ENFORCEMENT DIVISION
OFFICE OF ENFORCEMENT AND COMPLIANCE MONITORING

STATIONARY SOURCE COMPLIANCE DIVISION
OFFICE OF AIR QUALITY PLANNING AND STANDARDS

Limiting Potential to Emit in New Source Permitting

I. Introduction

The Louisiana-Pacific Case

Types of Limitations that will Limit Potential to Emit

Time Periods for Limiting Production and Operation

V. Sham Operational Limits

A. Permits with conditions that do not reflect a source's planned mode of operation are void ab initio and cannot act to shield the source from the requirement to undergo preconstruction review.

1. Sham permits are not allowed by 40 CFR 52.21(r)(4)

2. Sham permits are not allowed by the definition of potential to emit: 40 CFR 52.21(b)(4), 51.165(a)(1)(iii), 51.166(b)(4)

3. Sham permits are not allowed by the Clean Air Act

B. Guidelines for determining when minor source construction permits are shams.

1. Filing a PSD or nonattainment NSR application

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Limiting Potential to Emit in New Source Permitting

I. Introduction

Whether a new source or modification is major and subject to new source review under Parts C and D of the Clean Air Act is dependent on whether that source or modification has or will have the potential to emit major or significant amounts of a regulated pollutant. Therefore, the definition of "potential to emit" under the new source regulations is extremely important in determining the applicability of new source review to a particular source. The federal regulations define "potential to emit" as:

> the maximum capacity of a stationary source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of fuel combusted, stored or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is federally enforceable.

40 C.F.R.§§ 52.21(b)(4), 51.165(a)(1)(iii), 51.166(b)(4).

Permit limitations are very significant in determining whether a source is subject to major new source review. This is because they are the easiest and most common way for a source to obtain restrictions on its potential to emit. A permit does not

have to be a major source permit to legally restrict potential emissions. A minor source construction permit issued pursuant to a state program approved by EPA as meeting the requirements of 40 C.F.R. § 51.160 is federally enforceable. In fact, any permit limitation can legally restrict potential to emit if it meets two criteria: 1) it is federally enforceable as defined by 40 C.F.R. §§ 52.21(b)(17), 51.165(a)(1)(xiv), 51.166(b)(17), i.e., contained in a permit issued pursuant to an EPA-approved permitting program or a permit directly issued by EPA, or has been submitted to EPA as a revision to a State Implementation Plan and approved as such by EPA; and 2) it is enforceable as a practical matter. The second criterion is an implied requirement of the first criterion. A permit requirement may purport to be federally enforceable, but, in reality cannot be federally enforceable if it cannot be enforced as a practical matter.

Non-permit limitations can also legally restrict potential to emit. These limitations include New Source Performance Standards codified at 40 C.F.R. Part 60 and National Emission Standards for Hazardous Air Pollutants codified at 40 C.F.R. Part 61.

The appropriate means of restricting potential to emit through permit conditions has been an issue in recent enforcement cases. Through these cases and through guidance issued by EPA, the Agency has addressed three questions: what types of permit

limitations can legally limit potential to emit; whether long averaging times for production limitations are enforceable as a practical matter; and whether sources may limit potential to emit to minor source levels as a means of circumventing the preconstruction review requirements of major source review.

II. The Louisiana-Pacific Case

In United States v. Louisiana-Pacific Corporation, 682 F. Supp. 1122 (D. Colo. Oct. 30, 1987) and 682 F. Supp. 1141 (D. Colo. March 22, 1988), Judge Alfred Arraj discussed the type of permit restrictions which can be used to limit a source's potential to emit. The Judge concluded that:

> ...not all federally enforceable restrictions are properly considered in the calculation of a source's potential to emit. While restrictions on hours of operation and on the amount of materials combusted or produced are properly included, blanket restrictions on actual emissions are not.

682 F. Supp. at 1133.

The Court held that Louisiana-Pacific's permit conditions which limited carbon monoxide emissions to 78 tons per year and volatile organic compounds to 101.5 tons per year should not be considered in determining "potential to emit" because these blanket emission limits did not reflect the type of permit conditions which restricted operations or production such as limits on hours of operation, fuel consumption, or final product.

The Louisiana-Pacific court was guided in its reasoning by the D.C. Circuit's holding in Alabama Power v. Costle, 636 F. 2d 323 (D.C. Circuit 1979). Before Alabama Power, EPA regulations required potential to emit to be calculated according to a source's maximum uncontrolled emissions. In Alabama Power, the D. C. Circuit remanded those regulations to EPA with instructions

the Agency include the effect of in-place control equipment in defining potential to emit. EPA went beyond the minimum dictates of the D.C. Circuit in promulgating revised regulations in 1980 to include, in addition to control equipment, any federally enforceable physical or operational limitation. The Louisiana-Pacific court found that blanket limits on emissions did not fit within the concept of proper restrictions on potential to emit as set forth by Alabama Power.

Moreover, Judge Arraj found that:

> ...a fundamental distinction can be drawn between the federally enforceable limitations which are expressly included in the definition of potential to emit and ...(emission) limitations.... Restrictions on hours of operation or on the amount of material which may be combusted or produced ... are, relatively speaking, much easier to "federally enforce." Compliance with such conditions could be easily verified through the testimony of officers, all manner of internal correspondence and accounting, purchasing, and production records. In contrast, compliance with blanket restrictions on actual emissions would be virtually impossible to verify or enforce.

Thus, Judge Arraj found that blanket emission limits were not enforceable as a practical matter

Finally, the Court reasoned that allowing blanket emission limitations to restrict potential to emit would violate the intent of Congress in establishing the Prevention of Significant Deterioration (PSD) program.

III. Types of Limitations that will Restrict Potential to Emit

As an initial matter in this discussion, a few important terms should be defined. Emission limits are restrictions over a given period of time on the amount of a pollutant which may be emitted from a source into the outside air. Production limits are restrictions on the amount of final product which can be manufactured or otherwise produced at a source. Operational limits are all other restrictions on the manner in which a source is run, including hours of operation, amount of raw material consumed, fuel combusted, or conditions which specify that the source must install and maintain add-on controls that operate at a specified emission rate or efficiency. All production and operational limits except for hours of operation are limits on a source's capacity utilization. Potential emissions are defined as the product of a source's emission rate at maximum operating capacity, capacity utilization, and hours of operation.

To appropriately limit potential to emit consistent with the opinion in Louisiana-Pacific, all permits issued pursuant to 40 C.F.R. §§51.160, 51.166, 52.21 and 51.165 must contain a

production or operational limitation in addition to the emission limitation in cases where the emission limitation does not reflect the maximum emissions of the source operating at full design capacity without pollution control equipment. Restrictions on production or operation that will limit potential to emit include limitations on quantities of raw materials consumed, fuel combusted, hours of operation, or conditions which specify that the source must install and maintain controls that reduce emissions to a specified emission rate or to a specified efficiency level. Production and operational limits must be stated as conditions that can be enforced independently of one another. For example, restrictions on fuel which relates to both type and amount of fuel combusted should state each as an independent condition in the permit. This is necessary for purposes of practical enforcement so that, if one of the conditions is found to be difficult to monitor for any reason, the other may still be enforced.

When permits contain production or operational limits, they should also have recordkeeping requirements that allow a permitting agency to verify a source's compliance with its limits. For example, permits with limits on hours of operation or amount of final product should require an operating log to be kept in which the hours of operation and the amount of final product produced are recorded. These logs should be available

for inspection should staff of a permitting agency wish to check a source's compliance with the terms of its permit.

When permits require add-on controls operated at a specified efficiency level, permit writers should include, so that the operating efficiency condition is enforceable as a practical matter, those operating parameters and assumptions which the permitting agency depended upon to determine that the control equipment would have a given efficiency.

An emission limitation alone would limit potential to emit only when it reflects the absolute maximum that the source could emit without controls or other operational restrictions. When a permit contains no limits on capacity utilization or hours of operation, the potential to emit calculation should assume operation at maximum design or achievable capacity (whichever is higher) and continuous operation (8760 hours per year).

The particular circumstances of some individual sources make it difficult to state operating parameters for control equipment limits in a manner that is easily enforceable as a practical matter. Therefore, there are two exceptions to the absolute prohibition on using blanket emission limits to restrict potential to emit. If the permitting agency determines that setting operating parameters for control equipment is infeasible in a particular situation, a federally enforceable permit

containing short term emission limits (e.g. lbs per hour) would be sufficient to limit potential to emit, provided that such limits reflect the operation of the control equipment, and the permit includes requirements to install, maintain, and operate a continuous emission monitoring (CEM) system and to retain CEM data, and specifies that CEM data may be used to determine compliance with the emission limit.

Likewise, for volatile organic compound (VOC) surface coating operations where no add-on control is employed but emissions are restricted through limiting VOC contents and quantities of coatings used, emission limits may be used to restrict potential to emit under the following limited circumstances. If the permitting agency determines for a particular surface coating operation that operating and production parameters (e.g., gallons of coating, quantities produced) are not readily limited due to the wide variety of coatings and products and due to the unpredictable nature of the operation, emission limits coupled with a requirement to calculate daily emissions may be used to restrict potential to emit. The source must be required to keep the records necessary for this calculation, including daily quantities and the VOC content of each coating used. Emission limits may be used in this limited circumstance to restrict potential to emit since, in this case, emission limits are more easily enforceable than operating or production limits.

IV. Time Periods For Limiting Production and Operation

As discussed above, a limitation specifically recognized by the regulations as reducing potential to emit is a limitation on production or operation. However, for these limitations to be enforceable as a practical matter, the time over which they extend should be as short term as possible and should generally not exceed one month. This policy was explained in a March 13, 1987 memorandum from John Seitz to Bruce Miller, Region IV. The requirement for a monthly limit prevents the enforcing agency from having to wait for long periods of time to establish a continuing violation before initiating an enforcement action.

EPA recognizes that in some rare situations, it is not reasonable to hold a source to a one month limit. In these cases, a limit spanning a longer time is appropriate if it is a rolling limit. However, the limit should not exceed an annual limit rolled on a monthly basis. EPA cannot now set out all-inclusive categories of sources where a production limit longer than a month will be acceptable because every situation that may arise in the future cannot now be anticipated. However, permits where longer rolling limits are used to restrict production should be issued only to sources with substantial and unpredictable annual variation in production, such as emergency

boilers. Rolling limits could be used as well for sources which shut down or curtail operation during part of a year on a regular seasonal cycle, but the permitting authority should first explc the possibility of imposing a month-by-month limit. For example, if a pulp drier is periodically shut down from December to April, the permit could contain a zero hours of operation limit for each of those months, and then the appropriate hourly operation limit for each of the remaining months. Under no circumstances would a production or operation limit expressed on a calendar year annual basis be considered capable of legally restricting potential to emit.

V. Sham Operational Limits

In the past year, several sources have obtained purportedl. federally enforceable permits with operating restrictions limiting their potential to emit to minor or de minimis levels for the purpose of allowing them to commence construction prior to receipt of a major source permit. In such cases where EPA can demonstrate an intent to operate the source at major source levels, EPA considers the minor source construction permit void ab initio and will take appropriate enforcement action to prevent the source from constructing or operating without a major source permit.

The following example illustrates the kind of situation addressed in this section: An existing major stationary source proposes to add a 12.5 megawatt electric utility steam generating unit, and applies for a federally enforceable minor source permit which restricts operation at the unit to 240 hours per year. Because the project is designed as a baseload facility, EPA does not believe that the source intends to operate the facility for only 240 hours a year. Further investigation would probably uncover documentation of the source's intent to operate at higher levels than those for which it is permitted.

This situation raises the question of whether a source can lawfully bypass the preconstruction or premodification review requirements of Prevention of Significant Deterioration (PSD) and nonattainment New Source Review by committing to permit conditions which restrict production to a level at which the source does not intend to operate for any extensive time. If, after constructing and commencing operation, the source obtains a relaxation of its original permit conditions prior to exceeding them, does this constitute a violation of the preconstruction review requirements? This section discusses why it is improper to construct a source with a minor source permit when there is intent to operate as a major source, and provides guidelines for identifying these "sham" permits.

A. Permits with conditions that do not reflect a source's planned mode of operation are void ab initio and cannot act to shield the source from the requirement to undergo preconstruct/ review.

1. Sham permits are not allowed by 40 CFR §52.21(r)(4)

Section 52.21(r)(4) states:

> At such time that a particular source or modification becomes a major stationary source or major modification solely by virtue of a relaxation in any enforceable limitation which was established after August 7, 1980 on the capacity of the source or modification otherwise to emit a pollutant, such as a restriction on hours of operation, then (PSD) shall apply to the source or modification as though construction had not yet commenced on the source or modification.

When a source that is minor because of operating restrictions in a construction permit later applies for a relaxation of that construction permit which would make the source major, Section 52.21(r)(4) prescribes the methodology f determining best available control technology (BACT). However, it does not foreclose EPA's ability, in addition to the retroactive application of BACT and other requirements of the PSD program, to pursue enforcement where the Agency believes that the initial minor source permit was a sham. EPA will limit its activity to requiring application of 40 CFR 52.21(r)(4) only for the cases where a source legitimately changes a project after finding that the operating restrictions which were taken in good faith cannot be complied with. Whether a source has acted in good faith is a factual question which is answered by available evidence in the particular case.

2. Sham permits are not allowed by the definition of potential to emit: 40 C.F.R. §§52.21(b)(4), 51.165(a)(1)(iii), 51.166(b)(4).

The definition of potential to emit enables sources to obtain federally enforceable permits with operational restrictions as a means of limiting emissions to minor source levels. However, implicit in the application of these limitations is the understanding that they comport with the true design and intended operation of the project.

3. Sham permits are not allowed by the Clean Air Act

Parts C and D of the Clean Air Act exhibit Congress's clear intent that new major sources of air pollution be subject to preconstruction review. The purposes for these programs cannot be served without this essential element. Therefore, attempts to expedite construction by securing minor source status through the receipt of operational restrictions from which the source intends to free itself shortly after operation are to be treated as circumvention of the preconstruction review requirements.

B. Guidelines for determining when minor source construction permits are shams.

EPA's determination that a purportedly federally enforceable construction permit is a sham is made based on an evaluation of specific facts and evidence in each individual case. The following are criteria which should be scrutinized when making such a determination:

1. Filing a PSD or nonattainment NSR permit application

If a major source or major modification permit application is filed simultaneously with or at approximately the same time as the minor source construction permit, this is strong evidence of an intent to circumvent the requirements of preconstruction review. Even a major source application filed after the minor source application, but either before operation has commenced or after less than a year of operation should be looked at closely.

2. Applications for funding

Applications for commercial loans or, for public utilities, bond issues, should be scrutinized to see if the source has guaranteed a certain level of operation which is higher than that in its construction permit. If the project would not be funded or if it would not be economically viable if operated on an

extended basis (at least a year) at the permitted level of production, this should be considered as evidence of circumvention.

3. Reports on consumer demand and projected production levels.

Stockholder reports, reports to the Securities and Exchange Commission, utility board reports, or business permit applications should be reviewed for projected operation or production levels. If reported levels are necessary to meet projected consumer demand but are higher than permitted levels, this is additional evidence of circumvention.

4. Statements of authorized representatives of the source regarding plans for operation.

Statements by representatives of the source to EPA or to state or local permitting agencies about the source's plans for operation can be evidence to show intent to circumvent preconstruction review requirements.

Note that if a determination is made that a permit is a "sham" for one pollutant and, therefore, the source is a major source or major modification, the permit may possibly still contain valid limits on potential to emit for other pollutants.

In such cases, the entire source must still go through new source review, during which, for PSD review, all pollutants for which there is a net significant increase must be analyzed for BACT. In nonattainment new source review, new sources must have LAER determinations only for pollutants for which they are major. Major modifications, however, must have LAER determinations for all nonattainment pollutants emitted in significant amounts. If the valid limits in a partially void minor source construction permit keep certain pollutants below significance levels, then those pollutants would not have to be analyzed for BACT or LAER. However, if a source or modification is determined to be major for PSD or NSR because part of its minor permit is deemed void, it would have to undergo BACT or LAER analysis for all significant pollutants.

VI. Enforcement Procedures

This guidance has discussed permit conditions which will legally restrict potential to emit, shielding a source from the requirement to comply with major new source permitting regulations. Failure by a permitting agency to adhere to these guidelines may result in a permit that does not legally restrict potential to emit, thereby subjecting a source to major new source review. If that source has not gone through preconstruction review, it is a significant violator of the Clean Air Act and is subject to enforcement for constructing or

modifying without a major new source permit.

The enforcement options available to EPA in these situations include administrative action under §§167 or 113(a)(5) of the Act or federal judicial action under §§ 113(b)(2), 113(b)(5), 113(c), or 167. Which enforcement option is selected depends on tha facts of the particular situation. (See July 15, 1988 guidance on EPA Procedures for Addressing Deficient New Source Permits.)

VII. Examples

The following examples are provided to illustrate the type of permit restrictions which would and would not legally limit potential to emit to less than major source thresholds. These examples are provided for purposes of clarifying the potential to emit and averaging time guidance only. They are not intended to reflect all the permit conditions necessary for a valid permit. Specific test methods, compliance monitoring and recordkeeping and reporting requirements are necessary to make permit limitations enforceable as a practical matter. The use of examples where averaging times are the longest times allowed under EPA policies is not intended to necessarily condone the selection of the longest averaging times; averaging times should in practice be as short as possible.

1. The minor source construction permit for a boiler contains the following restrictions: 250,000 gal fuel/month; 0.8% S fuel; 8000 hours/year.

These conditions are federally enforceable production and operation limits, but do not limit potential to emit because one of them does not meet EPA policies on enforceability as a practical matter. The averaging time for hours of operation, one of the operational limits necessary to restrict emissions to less than 250 tpy, exceeds a monthly or rolling yearly limit. If, instead of 8000 hours/year, the hourly restriction were stated as 666 hours/month, the permit would serve to keep the source a minor source, assuming the permit contains appropriate recordkeeping provisions.

2. A waferboard plant which has the physical capacity to emit over 300 tpy of carbon monoxide in the absence of using specific combustion techniques has the following permit restriction as the sole emission limitation: 249 tpy.

This does not limit potential to emit since an operational or production restriction is necessary for the source to be restricted to 249 tpy. The permit must contain a restriction on hours of operation or capacity utilization which, when multiplied by the maximum emission rate for the CO sources at the plant, results in emissions of 249 tpy. Additionally, while the

emission limit alone cannot restrict potential to emit, the emission limit is unenforceable as a practical matter since it is limited on an annual basis. The permit should contain a short term emission limit (in addition to the annual emission limit), consistent with the compliance period or parameter in the applicable test method for determining compliance.

3. A small scale rock crushing plant that cannot emit more than 240 tpy under maximum operation without controls (including plant-wide particulate emissions from transfer and storage operations) has the following permit restriction as the sole emission limitation: 240 tpy particulate matter.

Since no operational limitations are necessary for the source to emit below 250 tpy, no operational restrictions need be in the permit to limit potential to emit. However, although this is not a major source, the state agency should express the emission limit in this permit as a lb/hour measure or gr/dscf so that it will be enforceable as a practical matter.

4. A plant consisting solely of a small rock crusher has the following permit restrictions: 0.05 lb gr PM/dscf; fabric filter must be employed and maintained at 99% efficiency.

Assuming that maintaining the fabric filter at 99% efficiency will result in emissions of less than 250 tpy, this

permit would limit potential to emit if it also contained either 1) parameters that allowed the permitting agency to verify the fabric filter's operating efficiency or 2) a requirement to install and operate continuous opacity monitors (COMs) and a specification that COM data may be used to verify compliance with emission limits. Note that if this second alternative were adopted, it would not be necessary to require that the fabric filter be maintained at 99% efficiency.

To determine potential to emit, the efficiency rate of the fabric filter would be multiplied by the maximum uncontrolled emission rate, the maximum number of operating hours and maximum throughput capacity since there are no other operating or production limits. However, the efficiency rate of the fabric filter would not be enforceable as a practical matter unless there were an enforceable means to monitor ESP performance on a short term basis. The two alternatives mentioned above would satisfy this requirement.

5. A surface coating operation has the capability of utilizing 15,000 gal coating/month, with the following permit restrictions: 3.0 lb VOC/gal coating minus water; 20.5 tons VOC/month; monthly VOC emissions to be determined from records of the daily volumes of coatings used times the manufacturers specified VOC content.

This does not limit potential to emit since the source has the physical capacity to exceed 250 tpy of VOC, and the permit does not contain a production or an operational limitation. A monthly limit on gallons of coating used which when multiplied by 3.0 lb/gal equates to less than the 250 tpy threshold (e.g., 13,500 gallons/month), with appropriate recordkeeping, would generally be necessary to limit potential to emit. If, however, the permitting agency determines, due to the wide variety of coatings employed and products produced, that restrictions on operation or production are not practically enforceable, then the above emission limits could restrict potential to emit if there are requirements that the source calculate emissions daily, and keep the appropriate records.

If the source was alternatively to meet the 20.5 ton/month limit by employing add-on controls, the permit would need to contain an operational limit, such as the requirement to install and operate an incinerator at 99% efficiency. A requirement to monitor incinerator efficiency (either directly or indirectly via temperature monitoring for example), and appropriate recordkeeping requirements to verify compliance with each of the permit conditions would also be necessary to make the permit conditions enforceable as a practical matter. Note, however, that in the case where add-on controls are employed, the source may be able to meet a shorter term emission limit than the ton per month figure.

VIII. Conclusion

We hope this guidance will help EPA Regions identify sou: which have the potential to emit major amounts of an air pollutant which will subject those sources to the requirements of preconstruction new source review. Every source which is subject to these requirements but has not obtained a major new source permit should be seriously considered for enforcement action.

RECEIVED
APR 14 1987
Air & Radiation Branch
U.S. EPA Region V

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

APR - 8 1987

OFFICE OF
AIR AND RADIATION

MEMORANDUM

SUBJECT: Clarification of New Source Review Policy on Averaging Times for Production Limitations

FROM: John S. Seitz, Director
Stationary Source Compliance Division
Office of Air Quality Planning and Standards

TO: Air Management Division Directors
Regions I, III and IX

Air and Radiation Division Director
Region V

Air and Waste Management Division Director
Region II

Air, Pesticides and Toxics Management Division Directors
Regions IV and VI

Air and Toxics Division Directors
Regions VII, VIII and X

On March 13, 1986 the Stationary Source Compliance Division issued the attached memorandum which describes EPA's policy on maximum allowable averaging times for production and operational limitations. The limitations addressed are those which restrict a source's potential to emit to below PSD/NSR major source or major modification thresholds. Since the issuance of this memorandum last March, there have been several attempts to misuse the policy and apply it to emission limitations, rather than to production/operational limitations. The purpose of this memorandum is to distinguish between EPA's policy on averaging times for production limitations versus emission limitations, and to clarify the proper implementation of the March 13, 1986 memorandum.

Production limitations place restrictions on a source's operating rate, or rate of material throughput. Examples of production limitations are: hours of operation, gallons of coating per job or per unit time, million BTU per unit time,

material processed per unit time. Federally enforceable limitations on these parameters may serve to limit a source's potential to emit to below major source thresholds. EPA's policy on the longest averaging times that are considered Federally enforceable is set forth in the March 13, 1986 memorandum from Edward E. Reich. The longest averaging time generally acceptable for the purposes of practical Federal enforcement is one month, however, a source may seek approval of longer rolling averages as discussed in that memorandum.

Emission limitations place restrictions directly on the source's pollutant emission rate. Examples of emission limitations are: lb VOC/gal coating, lb VOC/hour, lb SO_2/MBTU, lb SO_2/hour, grains particulates/dscf. In order for emission limitations to be Federally enforceable from the practical stand point, they must be short term and specific so as to enable the Agency to determine compliance at any time. Emission limitations on a yearly basis alone (e.g., tons per year, or rolling yearly averages) do not satisfy EPA's requirements with respect to Federal enforceability. EPA's policy on averaging times for VOC emission limitations is stated in the January 20, 1984 memorandum from John O'Connor, Acting Director of OAQPS.

The March 13, 1986 Edward Reich memorandum describes EPA's policy on averaging times for production limitations which limit potential to emit to below major source or major modification thresholds. That memorandum states that the averaging time policy for production limitations does not apply to emission limitations. Therefore, limitations on a source's emission rate (e.g., lb VOC/unit time) designed to keep the source's potential emissions below NSR/PSD thresholds must comport with EPA policy on emission limitations. Sources may not use the March 13, 1986 memorandum on averaging times for production limitations to justify the use of longer (e.g., yearly or monthly) averaging times for emission limitations.

Any questions regarding this memorandum or the March 13, 1986 memorandum may be directed to Sally M. Farrell at FTS 382-2875.

Attachment

THE TEXT YOU ARE VIEWING IS A COMPUTER-GENERATED OR RETYPED VERSION OF A PAPER PHOTOCOPY OF THE ORIGINAL. ALTHOUGH CONSIDERABLE EFFORT HAS BEEN EXPENDED TO QUALITY ASSURE THE CONVERSION, IT MAY CONTAIN TYPOGRAPHICAL ERRORS. TO OBTAIN A LEGAL COPY OF THE ORIGINAL DOCUMENT, AS IT CURRENTLY EXISTS, THE READER SHOULD CONTACT THE OFFICE THAT ORIGINATED THE CORRESPONDENCE OR PROVIDED THE RESPONSE.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

March 13, 1986

MEMORANDUM

SUBJECT: Time Frames for Determination of Applicability to New Source Review

FROM: Director
Stationary Source Compliance Division
Office of Air Quality
Planning and Standards

TO: Bruce P. Miller, Acting Chief
Air programs Branch, Region IV

In a recent phone conversation between Roger Pfaff of your staff, and Sally Farrell of my staff, time frames for determination of compliance with permit restrictions on hours of operation, or rates of materials/fuel use were discussed. Specifically, inquiry was made as to whether SCCD considered a rolling yearly average on a daily basis (i.e. averaging some parameter over 365 days, where each day starts the summing/averaging period for a new year) as an appropriate measure of applicability to Prevention of Significant Deterioration (PSD) and nonattainment new source review (NSR).

A source may commit to limit its production by including federally enforceable restrictions on hours of operation or fuel and materials consumption in its permit. Limited operation of the source may serve to lower its emission rates to levels below those which trigger PSD/NSR review. Such permit limits are used by sources to avoid major source review.

At the NSR meetings in Denver this January, attended by new source review staff from Headquarters and all ten Regions, it agreed that a month long period for these permit restrictions is the longest time frame that should be accepted as federally enforceable. Under the constraints of Section 113

of the Clean Air Act it would, in practice, be difficult to enforce violations using a longer time frame, such as an annual average. Upon finding of a violation, Section 113 requires that EPA first issue a Notice of Violation. If the violation extends 30 days beyond notification, the Agency may then issue an order to comply or take civil action. If compliance is based on an annual average, there may be a considerable time lag before the violation can be enforced. Therefore, a one month limit is agreed to be the maximum time EPA should generally accept for avoiding a PSD/NSR threshold. However, if a source is unable to use the monthly limit (due to seasonal variations in productions for example), rolling periods of longer durations are also acceptable for determining applicability to major source review. With the year long rolling average on a daily basis, the source must demonstrate compliance for any consecutive 365 days, thereby averting the problems encountered with enforcing discrete annual averages. A twelve month rolling average (year long, on a twelve month basis) is the maximum time frame that would be accepted as federally enforceable.

It should be emphasized that the averaging periods recommended are for the purpose of determining applicability to new source review. The above policy is not to be extended to determination of compliance with emission limitations.

If you have any questions, please contact Sally M. Farrell at FTS 382-2875.

Edward E. Reich

cc: Marcia Spink, Region I
Ken Eng, Region II
Ben Mykijewycz, Region III
Roger Pfaff, Region IV
Ron Van Mersbergen, Region V
Troy Oberg, Region VI
Dan Rodriguez, Region VII
Steven Frey, Region VIII
Matt Haber, Region IX
David Bray, Region X
Kirt Cox, OAQPS

MAR 13 1986

MEMORANDUM

SUBJECT Time Frames for Determination of Applicability to New Source Review

FROM: Director
Stationary Source Compliance Division
Office of Air Quality Planning and Standards

TO Bruce P. Miller, Acting Chief
Air Programs Branch, Region IV

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CONCURRENCES

SYMBOL	EN-341	EN-341					
SURNAME	Farrell	Biondi	[illegible]	[illegible]			
DATE	[illegible]	2/18/86	[illegible]	3/11/86			

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If you have any questions, please contact Sally M. Farrell at FTS 382-2875.

Edward E. Reich

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Ron Van Mersbergen, Region V
Troy Oberg, Region VI
Dan Rodriguez, Region VII
Steven Frey, Region VIII
Matt Haber, Region IX
David Bray, Region X
Kirt Cox, OAQPS

EN-341:S.Farrell:mrd:3-4-86:Disk#1:Draft#1:3/3/86:Final#1:3/4/86

July 15, 1997

Robert Hodanbosi, Chief
Division of Air Pollution Control
Ohio Environmental Protection Agency
1600 WaterMark Drive
Columbus, Ohio 43215-1034

Dear Mr. Hodanbosi:

The purpose of this letter is to advise your agency on how three facilities in Cleveland, Ohio--LTV Steel, Stein, Inc., and Allega, Inc.--should be classified under the Title V operating permit program. LTV Steel produces slag as a by-product of its steel production. The LTV facility sells its basic oxygen furnace (BOF) slag to Stein, and its blast furnace slag to Allega. Stein and Allega process the slag into aggregates to sell to other companies. The issue presented is whether these three facilities should be considered as separate Title V sources or as one Title V source. Our analysis indicates that they should be considered a single source.

The prevention of significant deterioration regulations in 40 CFR 52.21(b)(5) and (6) and the Title V operating permit regulations in 40 CFR 70.2 define a stationary source as any building, structure, facility, or installation whose pollutant-emitting activities belong to the same industrial grouping, are located on contiguous or adjacent properties, and are under the control of the same person or entity (or entities under common control). According to the March 16, 1979, USEPA memorandum from the Division of Stationary Source Enforcement director titled "Definition of a Source," determinations of what entities are under common control with the applicant are to be made on a fact- specific case-by-case basis. A number of factors could decide common control status.

USEPA is guided by the definition of control used by the Securities Exchange Commission (SEC). For SEC purposes, control means, "[T]he possession, direct or indirect, of the power to direct or cause the direction of the management and policies of a person (or organization or association) whether through the ownership of shares, contract, or otherwise." See 17 CFR 210.1-02(g) (1996). If two sources are under different ownership, but one company has some decision-making ability in the second facility through a contractual agreement or a voting interest, the sources can be considered under common control.

Adjacent sources under different, independent ownership, may be considered under common control due to the nature of their operations. It is our understanding that, by contract: LTV Steel provides 100 percent of its slag product to the Stein and Allega facilities; the Stein and Allega facilities receive all of their slag product from the LTV Steel facility; and Stein and Allega are required by contract to accept 100% of LTV's BOF slag and blast furnace slag, respectively. Accordingly, but for the existence of the LTV Steel facility, there would be no slag processing plants at this location.

Although the three facilities may be independently owned and operated (and the companies operating them may run facilities elsewhere in the nation that do not interact with each other), the

operations of the Stein and Allega facilities at this particular location appear to be entirely dependent upon agreements or contracts with the LTV Steel facility. Thus the functions of the Stein and Allega facilities at this location are subject to control by LTV Steel through contract, as LTV would have power to cause the direction of the management decisions and policies of the Stein and Allega facilities. Therefore, for Title V purposes, LTV Steel, Stein, and Allega here are considered under common control.

USEPA's position is reflected in Engineering Guide # 58, a policy statement issued by the Ohio Environmental Protection Agency (OEPA). This Engineering Guide serves to clarify the definition of "facility" for new source review and Title V permitting. It states that two independently owned facilities may be under common control if there is a financial interest between them. The examples provided therein illustrate that if the two facilities are co-located and have the same 2-digit SIC code, and if the primary function of one facility is to support the production of the other facility's principal product, then the two facilities should be considered as one source for permitting.

The other factors important in determining whether facilities should be aggregated as a single source are clearly satisfied. LTV Steel, Stein, and Allega have the same 2-digit SIC code, so they belong to the same industrial grouping. Stein and Allega operate on property owned and leased by LTV Steel. The three facilities are located on contiguous property. Since the three factors are satisfied, it is USEPA's position that LTV Steel, Stein, and Allega should be aggregated together as a single source for Title V permitting.

Another independent rationale for aggregating Stein and Allega with LTV Steel as a single major source is because Stein and Allega are "support facilities" for LTV. As indicated in the August 7, 1980, Federal Register (45 FR 52695), "one source classification encompasses both primary and support facilities, even when the latter includes units with a different two-digit SIC code. Support facilities are typically those which convey, store, or otherwise assist in the production of the principal product." Stein and Allega are the sole recipients of LTV Steel's slag. Since the removal of slag is essential to LTV Steel's lawful production process, Stein andAllega assist in the production of LTV Steel. Therefore, they are support facilities and together constitute a single source.

While the three facilities are to be considered the same source for Title V applicability, individual Title V permits may be issued to them separately, or to different responsible parties. I hope this information is useful. We will consider any further information submitted by OEPA with regard to the issues presented in this matter. If you have any questions, please call Kaushal Gupta, of my staff, at (312) 886-6803.

Sincerely yours,

/s/

Cheryl L. Newton, Chief
Permits and Grants Section

cc: Jeanne Mallet, OEPA

From: Jeanne Mallett
To: Bhodanbo@Central-Office.DAPC, Jorleman@Central-Off.
Date: Wed, Jul 16, 1997 11:12 am
Subject: 7/15/97 letter to OEPA -Forwarded -Reply

fyi: I have not yet received any backup from their lawyer on the common control issue. Personally and legally, I do not believe they have a leg to stand on here on the facts presented, although it may be the case upon further investigation that Stein and Allega are under common control. What, if anything, do you want to do on this?

Cc: Misty, Ryan, Sarah
Ryan → Hopkins
FEB 22 1996

Vorys, Sater, Seymour and Pease
Suite 2100 • Atrium Two • 221 E. Fourth Street • Post Office Box 0236 • Cincinnati, Ohio 45201-0236 • Telephone (513) 723-4000 • Facsimile (513) 723-4056

Writer's Direct Dial Number
(513) 723-4024

February 20, 1996

Michael Hopkins, P.E.
Manager Air Quality Modeling
and Planning Division
Ohio EPA
1800 WaterMark Drive
Columbus, Ohio 43266

RE: Relocation of Air Emissions Source Within a Facility

Dear Mike:

This letter is a follow-up to our conversation of January 16, 1996 regarding the relocation of emission units within a "facility".

As you know, because of Title V operating permit requirements, Ohio EPA views Honda's Marysville Automobile (MAP) and Motorcycle plants (MMP), its East Liberty Automobile plant (ELP), and several other operations, as one "facility". Most operations are in Union County, while ELP is located in Logan County.

Under OAC Rule 3745-31-01(J)(1)(a)(iii), a modification, and the requirement to obtain a Permit to Install (PTI), is triggered when there is a physical change to an air contaminant source that "results in the relocation of the source to new premises, including, but not limited to, the movement of any existing source from another state, *county*, or other geographic location..." (emphasis added).

"Premises" is not defined but it is assumed to refer to a facility's premise number as assigned by Ohio EPA.

Prior to Ohio Administrative Code (OAC) Chapter 3745-77 and the now accepted view that these different plants constitute one facility, a PTI modification would have been required to move an emission unit from one county to another.

However, because the various plants are now viewed as one "facility", this provision of the PTI rules appears to have the unintended consequence of requiring a permit modification when an emission unit is moved within the facility, only because of the "county" criterion.

Honda submitted comments on January 8, 1996 to the public record relating to the rulemaking revising OAC Chapter 3745-31, suggesting that the definition should be revised so as to trigger a modification when a company moves an emissions unit from one facility to another, but not within a facility. This would provide the needed relief to facilities straddling county lines.

In our discussion, you indicated there are several facilities in Ohio that straddle county lines. Ohio EPA allows these facilities to move emission units within the facility provided the emission unit remains unchanged. In other words, provided the movement of the emission unit does not trigger the other modification criteria, the movement is allowed by Ohio EPA without requiring a permit to install. You requested in these situations that the permittee provide documents supporting its position that the emission unit remains unchanged, as well as documents indicating its new location, stack height, etc.

A movement of the specific emission unit we discussed is no longer contemplated but the issue is still relevant for future planning. Based on our discussion and assuming concurrence that there are no changes that would otherwise trigger a modification, we would anticipate that in such cases the permit would be administratively modified to indicate the new location, but no other changes would be required.

Your assistance in this matter and the Ohio EPA's common sense approach is appreciated. If my understanding of our conversation conflicts with yours, please do not hesitate to contact me.

Sincerely,

Bill

William D. Hayes

WDH/jh

cc: Richard Lahiere, EHSG, Honda of America Mfg.
Christopher Korleski, Legal, Honda of America Mfg.
Jeanne Mallett, Ohio EPA Legal
Phil Henrichs, Ohio EPA SWDO
Kim Ness, Ohio EPA CDO

Mike Hopkins

Ohio EPA

Division of Air Pollution Control

inter-office communication

to: All DO's and Permit Role LAA's

from: Tom Rigo Tom

subject: Multiple Premise #'s at the Same Facility

date: April 25, 1994

It has been brought to our attention that there are some facilities in Ohio that have been permitted separately under different 10-digit premise numbers for the same facility location. We believe this has happened because the term facility was not clearly defined in Ohio's rules. However, Title V requirements OAC rule 3745-77-01(W) specifically define what constitutes a major source (facility). You should note that this is the same definition that has defined facility for federal new source review programs such as PSD. The definition, in part, is as follows:

(W) "MAJOR SOURCE" MEANS ANY STATIONARY SOURCE OR ANY GROUP OF STATIONARY SOURCES THAT ARE LOCATED ON ONE OR MORE CONTIGUOUS OR ADJACENT PROPERTIES AND UNDER COMMON CONTROL OF THE SAME PERSON (OR PERSONS UNDER COMMON CONTROL) BELONGING TO A SINGLE MAJOR INDUSTRY GROUPING AND THAT ARE DESCRIBED IN PARAGRAPHS (W)(1), (W)(2), OR (W)(3) OF THIS RULE. FOR THE PURPOSES OF DEFINING "MAJOR SOURCE," A STATIONARY SOURCE OR GROUP OF STATIONARY SOURCES SHALL BE CONSIDERED PART OF A SINGLE INDUSTRIAL GROUPING IF ALL OF THE POLLUTANT EMITTING ACTIVITIES AT SUCH SOURCE OR GROUP OF SOURCES ON CONTIGUOUS OR ADJACENT PROPERTIES BELONG TO THE SAME MAJOR GROUP (I.E., ALL HAVE THE SAME TWO-DIGIT CODE) AS DESCRIBED IN THE STANDARD INDUSTRIAL CLASSIFICATION MANUAL, 1987. ...

It is important that we identify where current facilities are not permitted correctly so that when facilities go to apply for a Title V permit or a Chapter 3745-35 permit (when the new automated system is on-line), we can provide them with a new 10-digit premise number. Under this new number, the facility will consolidate all the fragmented permitting that did occur with past permits. We want to permit facilities in the same manner in the future for both OAC Chapter 3745-35 and 3745-77 facilities.

Please complete the enclosed survey and return it to us by May 31, 1994. If you find that your office has not issued any multiple permits at the same facility, please indicate that fact on the survey form and return the form. Should you have any questions please contact me or Clara at (614) 644-2300.

DO's and LAA's:

Dennis Bush, NEDO
Bruce Blankenship, Canton
Lynn Malcolm, Akron
Bob Staib, Cleveland
Bill Garber, Toledo
Don Waltermeyer, NWDO
Curt Marshall, RAPCA
Harry Sweitering, Cincinnati
Phil Hinrichs, SWDO
Don Walden, Portsmouth
Harold Strohmeyer, NOVAA
Glen Greenwood, SEDO
Jay McCoy, CDO

cc: Clara Dailey, DAPC
Dave Newsad, CDO
Mike Hopkins, DAPC
Jim Orlemann, DAPC
Bob Hodanbosi, DAPC

Survey Form For Multiple Permits At The Same Facility Location

Facility Name	Address(es)	Premise Numbers

March 13, 1998

Donald Sutton, Manager
Permits Section
Division of Air Pollution Control
Illinois Environmental Protection Agency
P.O. Box 19506
Springfield, Illinois 62794-9506

Dear Mr. Sutton:

The purpose of this letter is to provide further guidance on the major modification provisions of the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21, as applied to a proposed "re-permitting" of the integrated steel mill (Application 93040047) at the Acme Steel Company (Acme) located in Chicago and Riverdale, Illinois. While the U. S. Environmental Protection Agency (USEPA) has had many discussions with your staff at the Illinois Environmental Protection Agency (IEPA) regarding the proposed Acme permit actions, we would like to clarify our position.

According to the information we have received, since approximately 1964, Acme has operated the facilities in Chicago and Riverdale as one integrated steel mill [with coke ovens and blast furnace operations in Chicago together with basic oxygen furnace (BOF), casting and hot strip mill operations in Riverdale]. The Acme integrated steel mill operates in a series of four batch processes. At the Chicago portion of the plant, coke from the coke plant is sent to the blast furnace. The blast furnace produces hot metal that is transported via commercial rail to the BOF shop in Riverdale. With the addition of scrap steel, the BOF shop produces liquid steel that is formed into steel coils in the continuous caster/hot strip mill. Both portions of Acme steel mill are located in the Chicagoland severe non-attainment area for ozone and the Lake Calumet non-attainment area for particulate matter less than 10 microns (PM-10).

In their recent proposal, Acme would like to revise a construction permit issued on March 4, 1994, that authorized the replacement of its old steel processing (teeming, soaking, reheating, and hot strip mill operations at the Riverdale site) with a new, more efficient continuous caster/hot strip mill. The 1994 permit necessitated the limiting of all major operations (i.e., production of coke, iron, steel, and fuel usage) such that the continuous caster/hot strip mill project would not be considered a major modification for emissions of PM-10 or sulfur dioxide.

Acme now believes that the project was permitted incorrectly. Specifically, Acme requests that the Riverdale and Chicago portions of the plant be considered two separate sources for New Source Review (NSR) permitting. Due to their belief that debottlenecking of the production line, as considered in the 1994 permit, did not occur with the addition of the new continuous caster/hot strip mill, Acme also requests the removal of all the 1994 permit conditions and limitations associated with the coke ovens, blast furnace and the BOF.

The primary issue presented is whether the Chicago and Riverdale facilities can be considered separate sources or one source. Secondary is the issue of "re-permitting" the 1994 netting

analysis based on different assumptions and limits. With respect to the first issue, the PSD regulations in 40 CFR 52.21(b)(5) and (6) and the Title V operating permit regulations in 40 CFR 70.2 define a stationary source as any building, structure, facility, or installation whose pollutant-emitting activities belong to the same industrial grouping, are located on contiguous or adjacent properties, and are under the control of the same person or entity (or entities under common control). The common control and industrial grouping factors important in determining whether operations should be aggregated as a single source are clearly satisfied. The integrated steel mill operations in Riverdale and Chicago have the same 2-digit SIC code and they are both owned and operated as single source by Acme. The remaining factor to consider in case-by-case single source determinations is consideration of the contiguity and/or adjacency of the Riverdale and Chicago operations. The Riverdale portions of the steel mill are located approximately 3.7 geographic miles from the closest part of the coke plant at the Chicago portion of the mill. Although the two sites are separated by Lake Calumet, landfills, I-94, and the Little Calumet River, USEPA considers that the close proximity of the sites, along with the interdependency of the operations and their historical operation as one source, as sufficient reasons to group these two facilities as one.

Furthermore, it would now be inappropriate to divide the activities of the steel mill into two sources, because it appears that the netting analysis supporting the 1994 permit depended on the whole facility being one source. The netting analysis performed for PM-10 demonstrated that Acme needed PM-10 emission reductions at the Chicago portion of the plant to offset the increases at the Riverdale portion of the plant due to the continuous caster/hot strip mill addition and resulting debottlenecking. Although Acme would now like to choose a different netting scenario, such that the 1994 operational restrictions would not be necessary to avoid major NSR, this
"re-permitting" request is not possible because of the timing of the proposed emission reduction credits. As 40 CFR 52.21(b)(3)(vi) states:

A decrease in actual emissions is creditable only to the extent that:
(a) ...
(b) It is federally enforceable at and after the time that actual construction on the particular change begins; and
(c) It has approximately the same qualitative significance for public health and welfare as that attributed to the increase from the particular change.

Although USEPA does not consider Acme’’s business choices to constitute mistakes that warrant permit review, if Acme feels that they need more flexibility or capacity than provided by the 1994 permit, USEPA will work with the IEPA to evaluate that request following the proper modification procedures provided by NSR.

We understand that Illinois EPA has been working closely with Acme to update the PM-10 attainment demonstration for the Lake Calumet PM-10 non-attainment area. Yet, the proposed use of some of those "voluntary reductions" for netting credits is questionable due to pending enforcement consent decrees which require those reductions. We applaud your efforts to work cooperatively to bring this area into attainment for PM-10, but such efforts cannot be made, such that they violate the principles of the PSD and NSR regulations.

I hope you will find this information useful. We will consider any further information submitted by Illinois EPA with regard to the issues presented in this matter. If we can answer any questions regarding these comments, or if we can provide any further guidance, please contact Keary Cragan, of my staff, at (312) 353-5669. Once again, thank you for your commitment to working with us to improve the permitting process.

Sincerely yours,

/s/

Cheryl L. Newton, Chief
Permits and Grants Section

Image Not Available

Image Not Available

OhioEPA
State of Ohio Environmental Protection Agency

P.O. Box 1049, 1800 WaterMark Dr.
mbus, Ohio 43266-0149
.) 644-3020
FAX (614) 644-2329

~~JAN 1 8 1992~~ JAN 1 4 1992

George V. Voinovich
Governor

MEMORANDUM

TO: Tom Tucker, DAPC

FROM: Jeanne Malliett, Legal

SUBJECT: Interpretation of "Source" in OAC 3745-18-04

DATE: January 9, 1992

You asked that I provide you with my interpretation of the term "source" in OAC 3745-18-04. As you recognize, the term is not defined in OAC 3745-18. Nor is it defined in the general provisions on air pollution control in OAC 3745-15.

Given these limitations, my legal opinion is that the interpretation of the term must follow a rule of reason. Looking at the structure of the OAC rules "air contaminant" is defined in OAC 3745-15-01 as "particulate matter, dust, fumes, gas, mist, smoke, vapor or odorous substances or any combination thereof." Air contaminants are controlled primarily by controlling emissions from air contaminant sources. The basic form of regulation of sources is the permit program. All air contaminant sources, except those specifically exempted by rule or by definition, must obtain a Permit to Install (PTI) and a Permit to Operate (PTO). Both the PTI rules, 3745-31-01 et seq., and the PTO rules, 3745-35-01 et seq., define an "air contaminant source." Although the definitions are somewhat different both define an air contaminant source in terms of a specific point of emissions smaller than an entire facility. "Air contaminant source" is defined under the PTI rules, as it is in the Revised Code Section 3704.01(C), as "each separate operation or activity that results in or may result in the emission of any air contaminant," and under the PTO rules as "any machine, device, apparatus, equipment, building or other principal facility that emits or may emit any air pollutant." Since sulfur dioxide emissions are air contaminants by definition in 3745-15-01, it is clear that the "sulfur dioxide emissions source" is an "air contaminant source "and subject to the PTI and PTO rules and therefore to the definition of "air contaminant source" contained therein. Moreover, the statutory definition cited above clearly applies to all rules promulgated under its authority.

By way of additional support against a contrary interpretation, it is important to note that U.S. EPA has reviewed our rules often in the context of the SIP review process and has at times mentioned in the preamble to its comments the difference between the federal definition of "source" which equates broadly to "facility" and the state definition of "air contaminant source" which envisions a smaller realm. Despite the comments, according to

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DAPC information, the U.S. EPA has not required a change or made its comments in terms of their definition as opposed to Ohio EPA's. There is thus a tacit recognition that the two definitions are different. Thus, Ford's concern that the word "source" in 3745-18-04 might be interpreted in line with the federal definition is not wellfounded, either in legal interpretation of Ohio rules or in actual practice in relations between the feds and Ohio EPA. However, as we discussed we should take affirmative action to clarify matters. The obvious solution is to amend 3745-15-01 to include a definition of "air contaminant source" or "source" that will be applicable to all air pollution rules except where specifically defined otherwise. I would also recommend that at some time soon the definitions of "air contaminant source" in 3745-31-01 and 3745-35-01 be reconciled and that that definition be placed in 3745-15-01 and removed from both other sections. In other words, there should be a single definition of the term "air contaminant source" or "source" applicable to all air pollution rules.

JMM/dms
cc: Patricia Walling-Miller, Chief, DAPC
Bob Hodanbosi, DAPC
Jim Orlemann, DAPC

PSD Permit Application Requirements

1) BACT - Best Available Control Technology... emission limitation based on the maximum degree of reduction for each pollutant... ...taking into account energy, environmental, economic impacts and other costs which is determined to be achievable. This can be modification of the process, fuel cleaning or treatment, innovative fuel combustion techniques or types of control. The method chosen must be achievable. This analysis should be "top-down" meaning that the control methods should be analyzed and the most effective achievable control technology should be chosen.

2) BAT - Best Available Technology - State requirement. Usually the employment of BACT above should be sufficient.

3) Air toxic's modeling -

4) Air quality impact analysis - if VOC net increase is greater than 100 t/y, then and ambient impact analysis will need to be done. This will include the gathering of ambient air quality data. This impact analysis must demonstrate that (1) NAAQS will be met, and (2) any applicable maximum allowable increase over the baseline concentration must be met.

5) Air quality models - Newest version of ISC models. This can be obtained from the USEPA BBS at ( ) xxx-xxxx.

6) Ambient air quality analysis (background and other sources) - Must look at any major sources which impact the area that this change would impact. Continuous air monitoring may be required for a 1 year time period prior to the submittal of the application.

7) Post construction monitoring will be needed if pre construction monitoring is needed.

8) Additional impact analysis (40 CFR 52.21(o)) -

(1) Analysis of the impairment to visibility, soils and vegetation that would occur as a result of the source or modification and general commercial, residential, industrial and other growth associated with the modification.

(2) provide an analysis of the air quality impact projected for the area as a result of general commercial, residential, industrial and other growth associated with the source or modification.

(3) Visibility monitoring may be required if near Class areas (none in Ohio?).

PSD Completeness letter
FO sends 1 month after initial application receipt

[date]

[name]
[address]

Dear

This letter is to inform you that your Prevention of Significant Deterioration (PSD) application, requesting an increase in the _____ allowable emission rate for the installation *[or modification]* of your _____ , which was received at __ _____ on _____ , has been determined to be complete. That is, all the major required elements necessary to make a determination upon the application are present.

The requested change at your facility will result in an increased potential to emit that is above the significance level for *[pollutant]* , therefore, approval is necessary under the PSD requirements. Ohio EPA has been delegated authority by USEPA to administer the program in Ohio. Our division is required, under the federal regulations, to review and determine the completeness of an application. In addition, the Ohio Administrative Code 3745-31, now contains requirements that mirror the federal PSD requirements for attainment area permitting.

We will be continuing our review of all the required aspects of the application, including but not limited to the modeling and the BACT analysis. Ohio EPA staff may request further information or notify you of deficiencies during the review process.

Since your application has been determined to be complete, we will be forwarding a copy to USEPA-Region 5, as we do with all applications, to expedite the overall process. *[In your case, since you have requested confidentiality for some items, our legal staff will review and make their determination of confidentiality. We may request from you a "sanitized" or public viewing version of the application when this review is complete. We will plan to send the sanitized version to Region 5.]*

This determination of completeness letter does not constitute approval of the application, nor does it indicate that a permit will be issued. It does not imply that the application is approvable, only that Ohio EPA has enough information to continue the review. If you ave any questions, please contact _____ of my staff at ( ) - .

Sincerely,

[FO supervisor]

MP/

cc: Mike Hopkins, AQM&P

_____ County

PUBLIC NOTICE
ISSUANCE OF DRAFT PERMIT TO INSTALL
SUBJECT TO PREVENTION OF SIGNIFICANT DETERIORATION REVIEW
FOR _____, _____ FACILITY

Public Notice is hereby given that the Staff of the Ohio Environmental Protection Agency (EPA) has recommended to the Director that the Ohio EPA issue a Permit to Install (PTI) to _____, _____, Ohio. The preliminary staff determination was issued on _____, 1992.

This draft permit proposes to allow the insta ation of a _____ having _____ _____ The maximum potential emissions from these sources will consist of the following pollutants:

Volatile Organic Compounds (VOC)	_____	TPY
Carbon Monoxide (CO)	_____	TPY
Nitrogen Oxides (NO_x)		TPY

_____

This facility is subject to the applicable provisions of the Prevention of Significant Deterioration (PSD) regulations as promulgated by U.S. EPA (40 CFR 52.21) (and the New Source Performance Standards (40 CFR 60 Subpart GG))

The maximum ambient increment allowed by U.S. EPA for _____ on an annual average is _____ micrograms/m^3 (ug/m^3). As a policy, the Ohio EPA allows PSD sources to consume half the available increment. In this case it is _____ ug/m^3 for _____. This source consumes _____

ug/m^3 which is less than one-half of the available increment. Based on this analysis, the project would comply with this policy.

A preliminary staff determination (draft permit no. _____) was issued on _____, 1992. Within 30 days from the date of this notice, any interested party may submit comments or request a public hearing. Comments are to be sent to the Ohio EPA's _____ _____, Ohio _____ Requests for a public hearing should be sent to Mary Cavin, Hearing Clerk, Ohio EPA-Legal Section, 1800 WaterMark Drive, Columbus, Ohio 43215.

Further information concerning this application, which is availabl for public inspection, may be secured from the Ohio EPA at the above address during normal business hours. Telephone number: (

_____

JAN 04 1995 MIKE H

SIL D

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

cc: Mary
Jim
Alan

Russian → Hopkins

NOV 22 1994

OFFICE OF
ENFORCEMENT AND
COMPLIANCE ASSURANCE

Mr. Robert H. Collom, Jr.
Chief, Air Protection Branch
Environmental Protection Division
Georgia Department of Natural Resources
4244 International Parkway, Suite 120
Atlanta, Georgia 30354

Dear Mr. Collom:

Your letter dated May 20, 1994, to Winston Smith was forwarded to my office to provide a response. I attempt, below to provide some answers to your questions, particularly as applied to the Wood Products Enforcement Initiative.

Regarding applicability of PSD regulations to a given modification, you correctly state that one of the first steps is to determine whether the increase(s) in potential to emit from the modification itself is greater than the listed significance levels. The contemporaneous time period is triggered only if (1) there is a significant increase(s) in emissions and (2) there is a contemporaneous decrease(s) in emissions which could be applied against the increase in emissions. If the same pollutant is involved, the source may net the increase against the decrease. If the net emissions increase (after deducting creditable decreases) is lower than the significance level for that pollutant, the source could "net out" of PSD review for that modification.

Net emissions increases include any emissions resulting from the modification. Thus, if the modification allows the facility to operate at higher production rates than pre-modification, the increase(s) in emissions associated with the increased production must also be factored in to determine whether the modification triggers PSD applicability. An early statement of EPA's policy with respect to "de-bottlenecking," as this applicability issue is called, was the July 28, 1983, memorandum from Edward Reich, Director, Stationary Source Compliance Division, OAQPS to Michael Johnston, Chief, Air Operations Section, Region X, a copy of which is enclosed for your reference. This policy may be relevant in determining potential past violations of the PSD requirements in the wood products industry.

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The second issue regarding modifications raised in your May 20 letter deals with a series of modifications, each insignificant, which, when summed together, amount to a significant increase for purposes of PSD. The most recent statement of EPA's guidance on this issue is the June 17, 1993, memorandum regarding 3M's Minnesota facility. We support your decision to follow this guidance.[1]

Your letter raised concerns about the use of AP-42 emission factors. The emission factors published in AP-42 were developed to assist federal, state, and local agencies in a variety of efforts, including regulatory development, policy development, modeling, permit writing, and compliance targeting. The objective of AP-42 is to provide a technical library of different pollution control and measuring technologies and methods used by different industry groups. As AP-42 has always stated, it does not yield accurate emissions estimates for individual sources.

Compliance tests have consistently shown the AP-42 factors to be unreliable in predicting emissions from wood products facilities; actual emission levels were significantly higher than anticipated using AP-42. It is important to note that most research used to develop AP-42 was taken from reports submitted to the Agency by wood products sources and, consequently, any underestimation of emissions based on AP-42 is, to some extent, related back to inaccurate data gathered by the industry. In this instance, the AP-42 emission factor for VOCs from plywood veneer dryers appears to underestimate VOC emissions by roughly a factor of six. Testing by the Weyerhaeuser Company confirms AP-42's underestimation of VOCs from plywood veneer dryers.

Enforcement authorities must make compliance determinations on an individual plant basis and one of the best methods of making this determination is to use actual compliance testing conducted at the facility under normal operating conditions. When a source is unsure whether it is in compliance with any air requirement a reliable course of action is to advise the facility to conduct such testing to determine compliance. With regard to determining past emissions levels of facilities where there are no historical emissions measurements, accurate emissions information can be deduced from data collected during current emissions testing and extrapolating back to the time of the modification, where possible. In performing this analysis, EPA prefers to use data from the source being analyzed or data from similar sources.

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[1] Note that this guidance does not apply to modifications affected by § 182(c)(6) of the Clean Air Act.

A final issue raised by your letter concerns whether emissions from presses built in the past will be considered fugitive. As you point out, EPA does not consider emissions from the presses at wood products facilities to be fugitive emissions. The New Source Review rules preamble states that emissions are not fugitive if a source could reasonably capture the emissions, regardless of the source's existing emission collection efforts. (45 Fed. Reg. 52,693, Aug. 7, 1980, see October 21, 1994 memorandum from John Seitz, Director, OAQPS to Air Division Directors, Regions I-X, regarding fugitive emissions, attached). As the 1980 NSR rules preamble states, a source's decision, or the general practice of the sources within that source category, to not collect emissions does not make those emissions fugitive. The emissions from presses in wood products facilities could reasonably be collected and therefore are not fugitive emissions. These emissions must be included in the total emissions of the facility for purposes of determining whether a source is major, or whether a modification is major.

The fact that similar industries (with hot presses that emit similar pollutants) were able to capture and vent such emissions through a stack creates a presumption that press emissions within the wood products industry are not fugitive. In addition, EPA believes that it would have been technically feasible to install hooding and stacks over presses in the 1970's and 1980's, and that the cost of this installation was economically feasible. As a final point, since the roof openings above presses and the dryer emission points could be considered functionally equivalent openings under the NSR regulations, it would be reasonable to conclude that emissions passing through these vents are not fugitive emissions.

I hope that this explanation is of use to you and your colleagues. Please feel free to contact me or my staff at (202) 564-2260 further regarding these and other issues.

Sincerely yours,

Kathie A. Stein, Director
Air Enforcement Division
Office of Regulatory Enforcement

Enclosures

cc: Winston A. Smith, Director
Air, Pesticides, and Toxics Management Division
EPA Region IV

Air Division Directors, Regions I-III & V-X

Branch Chiefs, Regions I-X

Contacts, Regions I-X Headquarters

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

JUL 28 1983

OFFICE OF
AIR, NOISE AND RADIATION

SUBJECT: PSD Applicability Pulp and Paper Mill

FROM: Director
Stationary Source Compliance Division
Office of Air Quality Planning and Standards

TO: Michael M. Johnston, Chief
Air Operations Section - Region X

Your request dated July 6, 1983, to Mike Trutna concerning a PSD applicability issue has been forwarded to my office for response. Your request concerns a pulp and paper company that is proposing to install a bleaching plant and a larger digester. While the construction of these units does not by itself cause increased emissions, emissions from the recovery boiler as a result of this construction activity will increase above the significance levels, but remain below the maximum design permit levels. Your question, is whether this a major modification under the PSD requirements.

The PSD rules at 40 CPR 52.21 (b) (2) define major modifications as "any physical change in or change in the method of operation of a major stationary source that would result in a significant net emissions increase of any pollutant subject to regulation under the Act." Net emissions increase is defined as:

> "the amount by which the sum of the following exceeds zero: Any increase in actual emissions from a particular physical change or change in method of operation at a stationary source; and Any other increases and decreases in actual emissions at the source that are contemporaneous with the particular change and are otherwise creditable."

Major modifications are, therefore, determined by examining changes in actual emission levels. Actual emissions are defined as:

"the actual rate of emissions of a pollutant from an emissions unit, as determined in accordance with sub- paragraph (ii)-(iv) below

(ii) In general, actual emissions as of a particular date shall equal the average rate, in tons per year, at which the unit actually emitted the pollutant during a two- year period which precedes the particular date and which is representative of normal source operation. The Administrator shall allow the use of a different time period upon a determination that it is more representative of normal source operation. Actual emissions shall be calculated using the units actual operating hours, production rates and types of materials processed, stored, or combusted during the selected time period.

(iii) The Administrator may presume that source specific allowable emissions for the unit are equivalent to the actual emissions of the unit.

(iv) For any emissions unit which has not begun normal operations on the particular date, actual emissions shall equal the potential to emit of the unit on that date."

Since this source has been in operation for some time, subparagraph (iv) does not apply. Your memo indicates that the recovery boiler is subject to a permit limit. Ray Nye of your staff has informed my staff that this permit limit binds the recovery boiler to a level of 0.1 gr/dscf, but does not provide any discussion on the unit's operating rate. The recovery boiler has operated in the past at a rate of 450 tons/day, consistent with existing digester capacity. Although the regulations provide a presumption for the use of allowable emissions when source specific limits are established, the preamble at 45 FR 52718 (August 7, 1980 states that:

"The presumption that Federally enforceable source specific requirements correctly reflect actual operating conditions should be rejected by EPA or a State, if reliable evidence is available which shows that actual emissions differ from the level established in the SIP or permit."

Therefore, since the recovery boiler could not have operated at a level higher than that provided by the existing digester capacity, any increase in actual emissions at the recovery boiler which will result from the increased capacity provided by the larger digester must be considered for the purposes of PSD applicability.

Once it is determined whether there is a significant net emissions increase (summing the emission increases from the larger digester, new bleaching plant and the increased operation of the recovery boiler) in conjunction with any contemporaneous emission increases and decreases, the PSD requirements should be applied, including BACT and air quality analyses. The regulations at 40 CFR 52.21(j)(3) require that:

> "A major modification shall apply best available control technology for each pollutant subject to regulation under the Act for which it would result in a significant net emissions increase at the source. This requirement applies to each proposed emissions unit at which a net emissions increase in the pollutant would occur as a result of a physical change or change in the method of operation in the unit."

Since the recovery boiler itself will not be undergoing a physical change or change in the method of operation, it will not have to apply BACT. However, all emissions increases must undergo air quality analysis and will consume applicable air quality increments.

This response has been prepared with the concurrence of OGC and CPDD. Should you have any questions concerning it, please contact Rich Biondi at 382-2831.

Edward E. Reich

cc: Mike Trutna
Peter Wyckoff
Dave Rochlin

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region 10, Seattle, Washington 98101

DATE: JUL 6 1983

SUBJECT: PSD Applicability

FROM: Michael M. Johnston, Chief
Air Operations Section

TO: Mike Trutna, Chief
New Source Review Office

A pulp and paper company is in the process of transferring the mill to a new owner. The new owner is proposing to install a bleaching plant and a larger digester to accommodate market demand for bleached pulp. While the construction of these units do not by itself cause increased emissions, emission from the recovery boiler as a result of this construction activity will increase above the significant levels, but remain below the maximum design permit limits. The company contends that PSD is triggered only if the net emissions increase from the specific modifications alone exceeds the threshold levels thereby releasing the project from review.

Region 10 has interpreted the term "net emissions increase" as any significant increase in actual emissions from a physical change or change in the method of operation at a stationary source. In this case, do we look at emissions from the specific modifications themselves or do we look at the overall change in actual emissions from the entire facility? The recovery boiler throughput was limited due to the size of the digester. Although the recovery boiler can accommodate the larger digester, we feel that the physical change and change in method of operation constitutes a modification.

If you have any questions please feel free to contact me or Ray Nye of my staff at (FTS) 399-7154.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE O F
AIR AND RADIATION

OCT 14 1994

MEMORANDUM

SUBJECT: Part D New Source Review (part D NSR) Requirements for Areas Requesting Redesignation to Attairment

FROM: Mary D. Nichols
Assistant Administrator
for Air and Radiation (6101)

TO: Director, Air, Pesticides and Toxics Management Division, Regions I and IV
Director, Air and Waste Management Division, Region II
Director, Air, Radiation and Toxics Division, Region III
Director, Air and Radiation Division, Region V
Director, Air, Pesticides and Toxics Division Region VI
Director, Air and Toxics Division, Regions VII, VIII, IX, and X

I. Introduction

With this memorandum, EPA is amending one aspect of guidance issued September 4, 1992[1] and September 17, 1993[2] regarding requirements for nonattainment areas requesting redesignation to attainment. In these previous memoranda, EPA indicated that States must submit and receive full approval of any part D NSR regulations that were required by the Act to be submitted to EPA prior to or at the time of the submission of a complete redesignation request. The EPA has reconsidered that policy, however, and is establishing a new policy under which

[1]Memorandum entitled, "Procedures for Processing Requests to Redesignate Areas to Attainment," from John Ca1cagni, Director, Air Quality Management Division, to Regional Air Division Directors.

[2]Memorandum entitled, "SIP Requirements for Areas Submitting Requests for Redesignation to Attainment of the Ozone and CO NAAQS On or After November 15, 1992," from Michael H. Shapiro, Acting Assistant Administrator for Air and Radiation, to Regional Air Division Directors.

nonattainment areas may be redesignated to attainment notwithstanding the lack of a fully-approved part D NSR program, provided the program is not relied upon for maintenance. In addition, EPA is not requiring that existing part D NSR rules be placed in the contingency portion of the maintenance plan pursuant to section 175A of the Act. As discussed below, however, EPA believes its new policy will assure that the statutory goals of part D NSR and section 175A to protect and maintain the NAAQS are achieved.

The EPA believes that this new policy is justifiable under the Agency's general authority to establish de minimis exceptions to statutory. requirements where the application of the statutory requirements would be of trivial or no value environmentally. (See Alabama Power Co.. v. Costle, 636 F.2d 323, 360-61 (D.C. Cir. 1979).]

II. Background/Clean Air Act Requirements

Section 107(d)(3)(E) of the Act requires that a State have in place a fully-approved SIP meeting all the requirements applicable to a nonattainment area under section 110 and part D of title I of the Act in order for the area to be redesignated to attainment.

In addition, section 175A requires that the area must have a fully-approved maintenance plan containing contingency provisions, as necessary, to promptly correct any violation of the applicable NAAQS that occurs after redesignation of the area. At a minimum, the contingency plan must "include a requirement that the State will implement all measures with respect to the control of the air pollutant concerned which were contained in the State implementation plan for the area before redesignation of the area as an attainment area."

The NSR requirements are contained in section 110(a)(2)(C) and in parts C and D of title I of the Act. Broadly speaking, section 110(a)(2)(C) of the Act mandates the development of a preconstruction review program to assure that the construction or modification of any stationary source is consistent with attainment of the NAAQS. The nonattainment NSR program in part D NSR and the attainment area prevention of significant deterioration (PSD) program in part C apply to major new sources and modifications of existing major sources. (Implementing regulations that set forth minimum requirements for State or local programs and Federal permitting programs have been promulgated at 40 CFR part 51 subpart I and appendix S, and 40 CFR section 52.21, respectively.)

To assure that major new or modified sources do not interfere with reasonable further progress towards attainment, nonattainment area part D NSR requires installation of control

technology representing the lowest achievable emissions rate (LAER) and emission offsets. To prevent "clean air" areas from significant degradation, the PSD program requires installation of best available control technology (BACT) and modeling to show that the new or modified source will not cause or contribute to violation of a NAAQS or a PSD air quality growth increment.

Previously, EPA interpreted these provisions together to require that any area seeking redesignation to attairment must have fully-approved part D NSR rules as part of the required fully-approved SIP. In addition, upon redesignation, the part D NSR rules were to be placed in the maintenance plan contingency provisions in accordance with section 175A of the Act unless the area needed to continue implementing part D NSR as one, element of the maintenance strategy.

III. NSR Policy and Legal Rationale

The EPA now believes that a de minimis exception to the requirement of section 107(d)(3)(E) for part D NSR is justifiable because requiring the adoption and full approval of a part D NSR program as a prerequisite to redesignation would not be of significant environmental value in certain circumstances. The EPA has reconsidered its earlier position because, once an area is redesignated to attainment, the part D NSR program may be replaced by the corollary PSD program, if it is shown through the maintenance demonstration that the area will maintain without part D NSR and because part D NSR need not become part of the contingency plan.

A. Preconstruction Review Programs in Attainment Areas

There are several provisions in the Act and in EPA's regulations that require preconstruction review of new or modified major sources in attainment areas to assess the impact of the proposed emissions increases on the applicable NAAQS. These include the PSD program which covers 100 ton per year (tpy) or 250 tpy or greater sources (depending on the source category), the preconstruction review requirements of 40 CFR 51.165(b) that cover 100 tpy or greater sources, and the Interpretive Offset Rule. As to ozone, there are some particular requirements that apply. The EPA believes these programs will ensure that major new sources and modifications are given adequate preconstruction review.

After redesignation to attainment, State PSD rules, or Federal PSD rules in a delegated program, must ensure, as required by sections 165(a)(3)(B) and 110(a)(2)(C) of the Act, that preconstruction review of new and modified major sources will prevent increases in emissions that would cause or contribute to violations of the NAAQS. [See 40 CFR 51.166(k), 40 CFR 52.21(k).]

In addition, EPA's regulations at 40 CFR 51.165(b) require that SIP's contain preconstruction review requirements that apply to new or modified 100 tpy or greater sources of a pollutant in areas designated attainment or unclassifiable for the pollutant in cases where the new or modified source would contribute to a violation of a NAAQS. This requirement provides for preconstruction review-for sources that are exempt from PSD due to PSD's higher (250 tpy) major source threshold for certain source categories.

In the absence of SIP provisions that comply with 40 CFR 51.165(b) or a part D NSR program, States would have to use the Interpretive offset Rule at 40 CFR 51 appendix S as a surrogate rule for permitting new and modified major sources in these attainment areas. (See 45 FR 31310, May 13, 1980.)

For S02, PM-10, NO_2 and CO, EPA has established levels of ambient impacts to determine whether the major new or modified source would cause or contribute to a violation. Where the source is found to cause or contribute to a violation, the source would be subject to more stringent technology and emissions mitigation requirements of appendix S or a 40 CFR 51.165(b) program.

With particular respect to ozone, because of the difficulty in modeling the impact of emissions from specific sources on ozone formation, EPA regulations [40 CFR 51.165(b)(3) and appendix S] do not fully address how emissions of ozone precursors should be treated to assure that major new or modified sources do not cause or contribute to a NAAQS violation. Nevertheless, if preconstruction monitoring or other information indicates the area is not continuing to meet the standard after redesignation to attainment, appendix S or a 40 CFR 51.165(b) program would also apply. The EPA believes that in any area that is designated or redesignated as attainment under section 107, but experiences violations of the NAAQS, these provisions (and any implementing SIP provisions) should be interpreted as requiring major new or modified sources to obtain VOC emission offsets of at least a 1:1 ratio, and as presuming [consistent with section 182(f)] that 1:1 NOx offsets are necessary .[3]

In addition, attainment (PSD) plans require that major new and modified sources apply BACT. Generally, BACT differs from LAER by enabling permitting authorities to justify, based on

[3]The EPA is in the process of revising EPA's rules for NSR and PSD, some of which will replace appendix S. However, the proposed revisions will not change the substantive permitting requirements where an attainment area is violating the ozone NAAQS.

economic, energy, and environmental impacts, the use of control technologies less effective than the most stringent available. In an area that is not meeting the NAAQS, EPA believes that due to consideration of the NAAQS violations, the state may impose a more stringent level of control than might be otherwise selected as BACT. [See Draft New Source Review Manual, page 8.54 (October 1990).]

Taken together, these preconstruction review programs can assure that major new or modified sources achieve the statutory goals of part D NSR and the maintenance provisions of section 175A.

B. Part D NSR and Contingency Provisions

Requiring the full approval of a part D NSR program would ensure that the program would become a contingency provision in the maintenance plan. As stated above, pursuant to section 175A(d) and section 107(d)(3)(E), the contingency plan must contain, at a minimum, all measures contained in the nonattainment SIP. However, EPA is interpreting the term "measure" as used in section 175A(d) so as not to include part D NSR.

The tern "measure" is not defined in section 175A(d) and Congress utilized that term differently in different provisions of the Act with respect to the PSD and part D NSR permitting programs. For example, in section 110 (a) (2) (A) , Congress required that SIP's include "enforceable emission limitations and other control measures, means, or techniques . . . as may be necessary or appropriate to meet the applicable requirements of the Act." In section 110(a)(2)(C), Congress required that SIP's include "a program to provide for the enforcement of the <u>measures</u> described in subparagraph (A), <u>and</u> regulation of the modification and construction of any stationary source within the areas covered by the plan as necessary to assure that national ambient air quality standards are achieved, including a permit program as required in parts C and D (i.e., PSD and part D NSR)." [Emphasis added.]

If the term "measures," as used in sections 110(a)(2)(A) and 110(a)(2)(C), had been intended to include PSD and part D NSR, there would have been no point to requiring that SIP's include both measures <u>and</u> preconstruction review under parts C and D (PSD or part D NSR). Thus, in sections 110(a)(2)(A) and (C), it is apparent that Congress distinguished the requirement for "measures" from the requirement for preconstruction review programs. On the other hand, in other provisions of the Act, such as section,161, Congress appears to have included PSD within the scope of the term "measures."

The fact that Congress used the undefined term "measure" differently in different provisions of the Act indicates that the term is susceptible to more than one interpretation and that EPA has the discretion to interpret it in a reasonable manner in the context of section 175A. Inasmuch as Congress itself has used the term in a manner that excluded PSD and part D NSR from its scope, EPA believes it is -reasonable to interpret "measure," as used in section 175A(d), not to include part D NSR. The reasonableness of this interpretation is further supported by the fact that PSD, a program that is the corollary of part D NSR for attainment areas, goes into effect in lieu of part D NSR,[4] and that, as discussed above, EPA intends to implement the PSD and other NSR programs in a way that will achieve the basic statutory goals of part D NSR. Therefore, EPA does not believe that part D NSR need be part of an area's contingency plan.

IV. Other Recquired Programs

The EPA is not changing its previously stated policy with respect to the need for States to adopt and receive full approval of other programs required by the Act prior to or at the time of the submission of a redesignation request. The existence of a corollary program for attainment areas distinguishes part D NSR from other required programs under the Act, such as enhanced inspection and maintenance and reasonably available control technology (RACT) programs, which have no corollary program. Moreover, EPA believes that those other required programs are clearly within the scope of the term "measure" as used in section 175A.

For further information regarding part D NSR requirements for areas redesignating to attainment, please contact Carla Oldham at (919) 541-3347; for general information about PSD requirements for attainment areas, contact Dennis Crumpler at (919) 541-0871.

cc: Air Branch Chief,- Regions I-X

[4]EPA is not suggesting that NSR and PSD are equivalent, but merely that they are the same type of program.

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NSR Rule

Special Report

July 15, 1994

In an effort to streamline scope of program . . .

AGENCY RELEASES FIRST DRAFT OF NEW SOURCE REVIEW REGULATIONS

EPA released a draft new source review (NSR) rule July 13 to subcommittee members charged with streamlining the agency's lengthy permit and review process for new emission sources. In the draft, agency officials attempt to simplify the scope of the new source review program by outlining a special applicability test geared at sources wishing to net out of NSR. Excerpts from the draft rule appear below.

The NSR reform process has been the subject of a two-year consensus building effort by industry, environmentalists, state officials and EPA. Subcommittee members will meet July 19-20 to discuss the rule.

In the draft rule, EPA describes two methods by which a facility can gain exemption from major NSR. The first category encompasses units that have recently been subject to a strict review for emissions controls, such as those that meet the best available control technology/lowest achievable emission rate (BACT/LAER) criteria.

In the second category, the draft rule offers a special applicability test for units that have state-of-the-art emissions controls but have not been subject to NSR permitting. The special test is geared toward units that need to minimize emissions in order to "net out" of new source review. Netting is the process by which a company designs or modifies a unit so a change in operations yields no net increase in emissions. This process can allow some units to avoid NSR entirely.

The special applicability test would use a maximum hourly emissions test similar to the New Source Performance Standard (NSPS) test outlined in the Clean Air Act. But the rule indicates that some major concerns with the special applicability test remain unresolved.

Under this test, changes that do not increase the unit's hourly potential emissions would not be considered a physical or operational change and would not trigger major new source review, according to the rule. However, the question remains as to what criteria distinguishes a poorly controlled unit from a well-controlled one, according to the draft. If the agency's criteria allows the exemption of a broad range of units, it could transform the existing applicability system into one based solely on potential emissions, according to the draft. The agency is seeking public comment on this issue.

The draft rule also includes a new applicability approach for major modifications based on plantwide applicability limits (PALs). PALs offer companies the flexibility to increase and decrease emissions within a plant in exchange for a cap on overall emissions. Excerpts from the PAL approach begin on page six

Excerpts from EPA's Draft NSR Applicability Proposal

III. Applicability of the New Source Review Program

The issue of NSR applicability proved to be one of the most difficult and divisive issues for the CAAAC's NSR Reform Subcommittee. While the issue was considered by a subgroup of the Subcommittee for several months and debated by the full Subcommittee during several sessions, consensus proved elusive. As a result, no formal recommendations were proffered to the CAAAC or EPA on this issue. Still the discussions provided EPA with a better understanding of the concerns of all sides and revealed a few areas of potential agreement. There were also common elements in many of the competing proposals circulated by members of the Subcommittee. Thus, while there was no CAAAC resolution of the issues, the following package of applicability measures builds upon the Subcommittee's deliberations.

Many Subcommittee participants focused on the complexity and inclusiveness of EPA's current applicability test as it applies to modifications at existing emissions units. Most applicability proposals put forward by Subcommittee members attempted to address this area of the applicability issue. As explained in more detail in the following sections, EPA is today proposing several changes to its applicability regulations to address these concerns.

First, EPA is proposing a less inclusive and simplified modification test for emissions units that have recently undergone a BACT or LAER review under Federal NSR or a similar technology review under a State minor NSR program. This proposed revision recognizes the reduced environmental risk from these units and provides further incentives for sources to meet the current requirements of these Federal or State technology programs. (See Section III(B).)

Also EPA is today proposing to clarify that where the physical or operational change at a plant does not involve an emissions unit, NSR will generally not apply, so long as all permit limitations remain in effect and unchanged. (See Section III(C).) In addition, EPA today proposes to change the baseline for determining if a physical or operational change will result in a significant emissions increase and thereby trigger major NSR. Specifically, EPA proposes to allow sources to

consecutive [illegible] change [illegible] This revision would reduce the impact that the current applicability approach has on cyclical industries, a problem recognized by many Subcommittee members. (See Section III(D).)

The Subcommittee was also interested in EPA's formalizing in its NSR regulations its policies on pollution control projects and source wide caps (dubbed "Plantwide Applicability Limits" or PALS). Both of these revisions, included in today's proposal, would allow States to approve these items where they meet specified criteria. (See Section III(E) for pollution control projects; III(F) for PALS.)

Industry representatives have also requested clarification of the existing "routine repair" exclusion from physical or operational change. Section III(G) of this Preamble discusses a proposed definition of "routine maintenance, repair and replacement."

Two other proposed actions are discussed in today's notice. First, EPA is proposing for comment an applicability approach which EPA committed to consider and take final action on in accordance with the Exhibit B settlement of the CMA lawsuit described above. (See Section III(H).)

In addition, EPA is seeking comment on what actions it should take with regard to its current applicability rules for modifications at electric utility steam generating units adopted as part of the "WEPCO" rule (57 FR 32314). Specifically, three options for the "actual-to-future actual" methodology are discussed: (1) retaining the methodology for utilities only; (2) expanding it to all source categories; and (3) eliminating the methodology. In conjunction with the first two options, EPA also seeks comment on whether the "demand growth" exclusion or other provisions of the existing rule should be changed. (See Section III(I).)

A. Background

1. Current Provisions

As previously discussed, the major NSR provisions of part C (PSD) and part D (nonattainment requirements) of title I of the Act apply to both the construction of new major sources and the major modification of existing major sources. For new, "greenfield" sources, applicability is a fairly straightforward proposition. The Clean Air Act, as implemented by EPA's regulations, sets applicability thresholds for nonattainment areas (annual emissions above 100 tons per year or smaller, depending on the severity classification of the nonattainment area) and for PSD areas (100 or 250 tons per year, depending on the source type). A new source with a "potential to emit" in excess of the applicable threshold amount triggers NSR.[1]

The determination of what should be classified as a modification subject to major NSR presents more difficult issues. The modification provisions of the NSR programs in parts C and D are based on the broad definition of modification in section 111(a)(4) of the Act: The term "modification" means any physical change in, or change in the method of operation of, a stationary source which increases the amount of any air pollutant emitted by such source or which results in the emission of any air pollutant not previously emitted." That section contemplates a two-step test for determining whether activities at an existing major facility constitute a major modification subject to new source requirements. In the first step, the reviewing authority determines whether a physical or operational change will occur. If so, then the permitting authority proceeds in the second step to determine whether the physical or operational change will result in an emissions increase over baseline levels.

The reference to "any physical change . . . or change in the method of operation" in section 111(a)(4) of the Act could -- read literally -- encompass the most mundane activities at an industrial facility (even the repair or replacement of a single leaky pipe, or an insignificant change [illegible] affected). However, EPA has recognized that [illegible] activity at a source subject to the [illegible] Parts C and D. As a result, EPA has adopted several exclusions from the "physical or operational change" component of the definition. For instance, EPA has specifically recognized that routine maintenance, repair and replacement, and changes in hours of operation or in the production rate are not by themselves considered a physical change or change in the method of operation within the definition of major modification [see current rules at 40 CFR 52.21(b)(2)(iii), 52.24(f)(5)(iii), 51.165(a)(1)(v)(C)(1), and 51.166(b)(2)(iii)].

The EPA has likewise limited the reach of the second step of the statutory definition of modification by excluding all changes that do not result in emissions increases above "significance" levels for the pollutant(s) in question [see, e.g., 40 CFR 51.165(a)(1)(x)]. Taken together, these regulatory limitations restrict the application of the NSR program in parts C and D to only "major modifications" at existing major stationary sources [see, e.g., 40 CFR 51.165(a)(1)(v)].

One key attribute of the NSR program in Parts C and D is that sources typically "net" modifications out of review by coupling proposed emissions increases at the source with contemporaneous emissions reductions. The landmark decision in Alabama Power Co. v. Costle, 636 F.2d 323 (D.C. Cir. 1979), endorsed use of this "plantwide bubble" concept in the PSD program. The court reasoned that since the principal purpose of the PSD program was to prevent deterioration in air quality, a PSD permit was unnecessary so long as new construction at an existing plant did not increase overall emissions to the environment. Thus, under EPA regulations promulgated in 1980 following Alabama Power (which are for the most part still in place today), source owners are given free rein to modify or even completely replace or add emissions units without obtaining a PSD permit so long as "actual emissions" do not increase over baseline levels at the plant as a whole. In 1984, EPA regulations expanding the use of the plantwide bubble to the nonattainment area new source review program under Title I, Part D of the Act was upheld in Chevron, U.S.A., Inc. v. NRDC, 467 U.S. 837 (1984).

As discussed in the general background section, applicability of the part C and D NSR provisions must be determined in advance of construction and is pollutant-specific. In cases involving existing sources, this requires a pollutant-by-pollutant determination of the emissions change, if any, that will result from the physical or operational change. The EPA's 1980 regulations implementing the PSD and nonattainment NSR programs thus inquire whether the proposed change constitutes a "major modification," i.e., a nonexcluded physical change or change in the method of operation "that would result in a significant net contemporaneous emissions increase of any pollutant subject to regulation under the Act." [See, e.g., 40 CFR 52.21(b)(2)(i)]. A "net emissions increase" is defined as the increase in "actual emissions" from the particular physical or operational change, taking into account the use of emissions control technology and restrictions on hours of operation or rates of production where such controls and restrictions are federally enforceable, together with any other contemporaneous increases or decreases in actual emissions [see, e.g., 40 CFR 52.21(b)(3)(i)].[2] In order to trigger major NSR, the net emissions increase must exceed specified "significance" levels when compared to a pre-modification "baseline" [see, e.g., 40 CFR 52.21(b)(2)(i) and 40 CFR 52.21(b)(23)].

The EPA's existing regulations define baseline emissions as "the average rate, in tons per year, at which the unit actually emitted the pollutant during a 2-year period which precedes the particular date and which is representative of normal source operation" [see, e.g., current rules at 40 CFR [illegible]]. The Administrator or "shall" allow use of a different time period

[illegible] 2 years [illegible] preceding [illegible] within the baseline [see 45 FR 52676, 52705, 52718]. However, in some cases it has allowed use of an earlier period.

With respect to modifications at existing sources, a prediction of whether the physical or operational change will result in a significant net increase in the source's actual emissions following the modification is thus necessary. In part this involves a straightforward and readily predictable engineering judgment -- how much air pollution the modified source could emit on an instantaneous basis under the planned production processes and pollution controls. It also necessarily involves a prediction of utilization rates -- how much of the source's full production capabilities as modified will be used per hour, and how many hours per year the source will be operated.

The regulations provide that when an emissions unit "has not begun normal operations," actual emissions equal the "potential to emit of the unit." [See, e.g., 40 CFR 52.21(b)(21)(iv).] The EPA and States interpret this provision as creating an initial presumption that because the changed unit "has not begun normal operations" following the change, it will operate at its full capacity year round, i.e., at its full potential to emit. The owner or operator is free to rebut this presumption by agreeing to not increase its level of actual emissions over pre-modification levels through the use of some combination of federally enforceable operational restrictions and pollution controls. The effect of this methodology is to place on the owner or operator the burden of assuring that actual emissions will not increase above baseline levels following the physical or operational change.

2. Litigation over the Actual-to-Potential Test

Industry has long been concerned that most physical or operational changes will initially register as emissions increases under the actual-to-potential test because most sources are operated at less than full capacity on an annual basis. As a result, a change at the source that does not affect instantaneous emissions rates shows up as a presumed emissions increase because the pre-modification actual utilization is less than post-modification utilization, which is presumed to reflect full capacity at all times. Hence, there is a widespread need to accept federally enforceable limits on post-modification emissions or operations to overcome the presumption of increased emissions in order to avoid NSR.[3] As a legal matter, industry argues that EPA's presumption should not apply in every case -- that is, EPA cannot properly presume that every nonroutine or otherwise nonexcluded change to an existing emissions units will result in that unit being utilized differently. They contend that the fact that a unit is "modified" should not necessarily mean that it has not "begun normal operations" following the change.

Two cases have addressed EPA's application of the actual-to-potential test, and specifically, the interpretation of the phrase "begun normal operations." In Puerto Rican Cement Co. v. EPA, 889 F.2d 292 (1st Cir. 1989), the court upheld EPA's application of the actual-to-potential methodology in a case involving renovations to a cement plant. The court specifically upheld EPA's interpretation that the words "emissions unit that has not begun normal operations" includes modified units as well as new units, citing a passage from the preamble that, in the court's view, made it clear that EPA intended to apply the actual-to-potential test to a "new or modified unit." 889 F.2d at 298 (45 FR 52676, 52677) (emphasis added by court).

The actual-to-potential test was also at the heart of a legal challenge brought by Wisconsin Electric Power Co. (WEPCO). See Wisconsin Electric Power Co. v. Reilly, 893 F.2d 901 (7th Cir. 1990). WEPCO proposed extensive life extension renovations at its [illegible] generating plant [illegible] EPA's projections, would increase reliability and decrease operating costs, thus likely leading to increased utilization and, hence, increased actual emissions. The EPA contended that these units -- as modified -- had not "begun normal operations" and EPA would have to rely on the units' post-change potential emissions to determine if the change would result in an emissions increase.

However, the Seventh Circuit disagreed with EPA's interpretation that "normal operations" had not begun. The court instead coined the phrase "like-kind replacement" to describe the type of renovations occurring at the WEPCO plant, where steam drums and other major components were replaced by equipment of similar design and function. 893 F.2d at 917. The court said that where the renovations were "like-kind replacements," EPA could not reasonably interpret its regulations to say that such a unit was so different that it has not begun normal operations.

Following the remand in the WEPCO case, EPA employed an "actual-to-future-actual" test for the WEPCO facility comparing WEPCO's emissions during the baseline period to estimated future actual emissions drawn from utilization projections available in the record.

3. The WEPCO Rulemaking

In 1992, EPA promulgated revisions to its applicability regulations creating special rules for physical and operational changes at electric utility steam generating units [see 57 FR 32314].[4] In this rule, commonly referred to as the "WEPCO Rule," EPA adopted an actual-to-future-actual methodology for all utility changes except the construction of a new electric generating unit or the replacement or reconstruction of an existing emissions unit. Under this methodology, a utility compares its actual annual emissions before the change with its projected annual emissions after the change to determine if a physical or operational change would result in a significant increase in emissions. The EPA is today seeking comment on the future of this methodology as is described in more detail in section III(I).

The EPA also made changes to the baseline portion of the actual-to-future-actual methodology. The EPA retained the existing regulatory language, but adopted a presumption that utilities may use as baseline emissions the actual emissions from any two consecutive years within the prior five years. This presumption would be superseded by the baseline changes proposed by EPA in section III(D).[5]

B. A "Clean Unit" Applicability Test

1. Introduction

The EPA is today proposing a new applicability test for changes to existing emissions units that already have state-of-the-art controls. In general, this new "clean unit" applicability test will allow States to assess proposed changes to an existing emissions unit based on the unit's permitted emissions rate (for units already subject to major NSR BACT or LAER) or based on its hourly potential emissions (for units which have not undergone major NSR review but which still meet BACT or LAER equivalent standards). Where the proposed change will increase the unit's emissions rate over the unit's allowable limit or hourly maximum, whichever applies, the source may still avoid NSR by netting the proposed increase under the existing rules. This proposed change would both simplify the applicability test for qualifying units and increase a source's flexibility in making changes at these units.

As discussed above, EPA typically applies an actual-to-potential test to determine whether a proposed change will result in an emissions increase at the source. However, EPA's current regulations [illegible] the permitting authority may assume that "source-specific available emissions for the unit equivalent to

the actual emissions of the unit" [see current rules at 40 CFR 52.21(b)(21)(iii)]. If this presumption is made and not rebutted by contrary information, the permitting authority would calculate whether there has been an emissions increase by comparing the unit's allowable emissions before the change to its potential emissions (including all allowable limits on emissions) after the change. In practice, EPA has limited this provision to those situations where a source may be emitting at higher rates than the allowable limit, or where insufficient data or measurement techniques exist to accurately quantify actual emissions levels. Where the actual emissions data are available and show that the actual emissions differ from the allowables, the presumption is overcome and actual emissions should be used (45 FR 52705, 52718).

During the Applicability Subgroup's discussions, several proposals were put forward which sought to expand when allowable emissions could be used. One industry proposal called for an "allowable to allowable" test to be applied to all "previously reviewed" sources. A compromise applicability package also included a proposal to use allowables for applicability in limited situations, such as a source that has already purchased offsets to cover its allowable limit. Another compromise proposal sought to apply an new source performance standard (NSPS) hourly "potential-to-potential" test to small changes at existing emissions units. While none of these proposals garnered the full Subcommittee's support, representatives of State and local regulators as well as environmental groups expressed general support for the idea that "benign" changes at existing emissions units do not need to face the actual-to-potential test and the complicated netting rules of existing NSR in every instance. There was also support for the proposition that the NSR applicability test should provide some deference to sources that have already undergone major NSR.

The EPA, after careful consideration of these discussions, has determined that the best approach is one that focuses on the existing emissions performance of a unit, rather than the change being proposed. Almost all sides identified the goal of ensuring that modified units apply state-of-the-art controls as being of paramount importance. Accordingly, where an emissions unit already meets this goal, environmental concerns associated with proposed changes are reduced. For example, it is EPA's experience that in many cases where an existing well controlled unit triggers major NSR, the permitting process does not necessarily result in better controls. On the other hand, where the review is focused on units which have not recently been required to meet a control technology requirement, NSR review can be expected to result in an appreciable level of additional control and therefore result in meaningful reductions in actual emissions to the atmosphere.

2. Description of the Proposal

The EPA is today proposing an exclusion from NSR for two categories of emissions units based on the level of control achieved at the unit. Each category would have its own test, with a different level of stringency, to determine whether a physical or operation change would occur. In the first category are emissions units which have recently undergone the most demanding review for emissions controls, a formal BACT or LAER review pursuant to major NSR. These units, as a consequence of having been permitted under major NSR, will have unit-specific BACT/LAER limits. Under EPA's proposal, applicability can be based on this allowable limit for the first ten years after the permit is issued.

Specifically, under this test, modifications to an emissions unit would not be considered a physical or operational change at the source provided the existing allowable emissions limit implementing the BACT or LAER determination remain in place. In other words, if the proposed change does not require a change in any unit-specific condition on emissions or operations related to emissions (for any averaging time) put in place to satisfy the BACT or LAER determination, major NSR is not applicable.

Provided the unit can still comply with its permited allowable emissions, the source is free to make any change at the permitted unit including those which could affect a unit's efficiency, capacity, availability, longevity and utilization. However, changes which would bring into question the original emissions unit's BACT/LAER control level or air quality impact (e.g., modified stack parameters which would cause or contribute to violation of any applicable ambient standard, replacement of the unit with a different type or size of unit, or reconstruction of the unit) would not be allowed.

The EPA is proposing that the new test apply to any unit which has received a major NSR permit within the ten years prior to the date of the proposed change. The choice of a ten year period acknowledges that a newly permitted source may take several years to realize its full operational level as it ramps up over its initial years of operation. Ten years also represents the outer bounds, in EPA's judgment, of the period over which a BACT or LAER determination can be considered current. The EPA solicits comment on the use of a longer (e.g., 15 years) or shorter (e.g., 5 years) period as being more appropriate.

It is EPA experience that many sources only keep accurate records on emissions or operations for three to five years, unless otherwise expressly required to do so. The EPA is therefore also soliciting comment on the effect a 10 year look back period would have on the accuracy of the baseline calculation, the need to condition the use of such a period upon the accuracy and completeness of available data, and the need to establish specific criteria for accuracy, completeness and recordkeeping when using old data.

The EPA is aware that in many cases an emissions unit not subject to major NSR is constructed or retrofit with a control technology or strategy nevertheless equivalent to the best controls applied in practice. Usually, this occurs when a source needs to minimize emissions in order to "net" a unit out of review or applies controls to comply with other provisions of the Act. In addition, a few states have a BACT/LAER equivalent control technology requirements as part of their minor NSR permitting program.

The EPA is therefore also proposing a special applicability test for emissions units which have state-of-the-art emissions control technology, but which have not been permitted under major NSR. For these units, EPA is proposing to use a maximum hourly emissions test patterned after the NSPS test found at 40 CFR 60.14. Specifically, for units within this second category, changes which do not increase the unit's hourly potential emissions would not be considered a physical or operational change and thus would not trigger major NSR.[6] For this exclusion to work, it is of course necessary to distinguish a well-controlled unit from a poorly controlled one. In other words, what criteria distinguish a unit eligible for this exclusion from one which shall not be entitled to rely on it? Criteria which allow a broad range of units to qualify could largely transform the existing applicability system into one based solely on potential emissions. The EPA solicits comment on the legal and policy implications of this approach.

One starting point is the level of control representative of current BACT/LAER. That is, if the unit in question has an emissions level equal to the most recently permitted BACT/LAER for its class or category of source then it generally would qualify for category two. The EPA believes that such a stringent test may, however, eliminate many units that while not controlled to the exact BACT or LAER limit, still should qualify as well-controlled

for this reason, is consideri two other mean

qualifying units for category two. The first would be based on an average of BACT/LAER for same or similar sources over a reasonably recent period of time (e.g., most recent three years). The second would be based on the unit's control level being within some percent (e.g., five or ten percent) of the most recent, or average of the most recent, BACT/LAER levels. The EPA is soliciting comment on the three different methods described above, as well as alternative criteria for use in differentiating between well-controlled and poorly controlled units for classification purposes.[7]

Under today's proposal, a unit that does not qualify for this exclusion could install controls meeting the criteria EPA establishes for category two units and thereby qualify for the exclusion. However, the controls or pollution reduction strategy must be in place and federally enforceable at the time the source relys on an exclusion under this provision. Finally, even for units excluded under this proposed revision, the modification must still comply with all otherwise applicable Clean Air Act and SIP requirements including minor new source review requirements.

C. Changes to Non-emitting Source Operations

The EPA is also proposing to add to the list of activities excluded from the definition of physical or operational change any proposed changes to existing non-emitting activities at the source. Under this proposed revision, sources could undertake changes at non-emitting facilities within the source (e.g., portions of a source devoted to parts assembly, transfer and packaging activities, and other activities that do not emit air pollutants), even though such changes would result in an increase in emissions at the source, provided that the source would continue to be operated in compliance with all applicable permitted limits (e.g., emissions, capacity, materials usage restrictions).

The current NSR regulations require only new or modified emissions units to apply BACT/LAER as a result of a major modification to the source [see, e.g., 40 CFR 52.21(j)(3)]. Although an increase in emissions at a source occurring solely from a physical or operational change at a non-emitting activity triggers major NSR, the review will not result in the application of BACT or LAER. Consequently, EPA believes that this proposed exclusion for changes at non-emitting units is reasonable considering the additional certainty and flexibility it adds to the major NSR applicability process. In addition, all otherwise applicable minor source permitting provisions remain in effect and nothing in today's proposed rule would allow a change that could cause or contribute to a violation of an air quality or PSD standard, or adversely impact the air quality related values (including visibility) of a Class I area. Thus, EPA believes that most of the benefits derived from the NSR program would not be compromised by this treatment of non-emitting activities. The only significant environmental detriment of this proposal is that it lessens the State's ability to manage increment consumption at levels below the maximum allowable concentration. The EPA believes this is not a substantial concern for most States but solicits comment on this issue.

The proposed exclusion would also cover the direct replacement of the non-emitting activity to the extent the replacement was equivalent to the original activity in terms of its effects on the source emissions. Specifically, if at its maximum rated capacity, the replacement activity's effect on emissions levels at the source would be no greater than the activity it replaced, the replacement would be excluded. The modification of a non-emitting activity in a way that results in emissions of air pollutants from the activity would, however, be considered a physical or operational change. Likewise, the replacement of a non-emitting unit with an emissions unit or activity would be a physical or operational change.

The construction of a new non-emitting activity would, however, not be excluded if the activity required an existing emissions unit to increase its level of operation to accommodate the new activity. In this type of circumstance, the EPA believes it is not reasonable to exclude new non-emitting activities which will cause the source to increase its operations, even where the new operational levels are consistent with the source's permitted allowable emissions. The EPA is proposing that the magnitude of the increase be measured as the actual expected increase in emissions at the source which relates to the maximum level of operation of the new activity. For example, a new non-emitting process line at its maximum rated capacity would require 10 percent of the total output from the plant's power boiler. In this case the total emissions associated with the new activity would be the emissions equivalent to 10 percent of the operation of the power boiler. Since as discussed above, in such circumstances a major NSR review would not impose any technology requirements, the EPA is soliciting comment on whether sources which have modeled allowable levels in compliance with all applicable standards and requirements should be allowed to exclude the construction of any non-emitting activity from review. The EPA is also soliciting comment on the need to amend the BACT/LAER requirements to apply to emissions units which, although not themselves being modified, will nevertheless increase emissions as a result of a non-emitting activity.

D. Revision to the Netting Baseline

Today's notice describes and solicits comment on a new method for determining a source's baseline for "netting" purposes.

1. Introduction

Industry has long argued that an actual-to-potential test inappropriately forces sources to make a "use or lose" choice. Every time a source makes a non-excluded change, the actual-to-potential test forces a source to limit its post-change emissions to its emissions in the immediately prior two years or some other representative period or else face NSR. This problem, for example, has been especially acute in the automobile industry where low utilization rates for many years leave plant managers with the choice of surrendering capacity (that would not be considered representative of normal operations under the current NSR rules) or taking the time and expense to secure a major NSR permit for even small changes to a portion of the plant.

Provisions in the existing regulations which allow the permitting authority to allow the use a different, "more representative" period have not, in the view of many Subcommittee members, alleviated the problem. As with other aspects of current netting rules, establishing more representative baseline periods can be complex and time-consuming, and involve often-disputed judgment calls.

Several industry applicability proposals included changing to a baseline that allows sources to use the highest 12 months out of the previous 10 years. Generally States favored this increase in flexibility. Moreover, some of the environmental group representatives recognized that the existing baseline approach has the impact of taking away "used and useful" capacity and that a longer baseline period would be appropriate. On the other hand, these participants were concerned that the test for determining a net emissions increase take into account not only annual emissions levels but short-term levels as well. The proposal outlined below attempts to meet these criteria.

2. The EPA Proposal

As discussed, under the current applicability methodology, the actual pre-change emissions of the source are compared to the potential post-change emissions of the unit as modified to determine if the change will result in a significant emissions increase. Actual emissions are generally the quantity of pollutant actually emitted

during the 2-year period just before the modification, although a different period may be used if the permitting authority determines that the period is more representative of normal source operations. In the WEPCO rule, EPA announced a new baseline presumption for utilities under which EPA would consider any 2 consecutive years within the 5 years prior to the proposed change as representative of normal source operations. The EPA is today proposing to extend the time period to 10 years and allow sources to base their actual emissions on the highest consecutive 12-month period during this 10-year period. This change would be available for all source categories and would be subject to the restrictions discussed below.

First, EPA's intent is to allow sources to determine applicability based on their highest level of utilization and not necessarily their highest emissions rate. The emissions rate of units at issue may be subject to any number of Federal or State restrictions (i.e., RACT, NESHAP, MACT, BACT, LAER, NSPS) as well as voluntary limits (e.g., reductions used for netting, offsets, Emission Reduction Credits creation, etc.) and these limits may have been imposed since the time the source achieved its highest emissions level. However, these limits must be included in establishing the baseline emissions. For this reason, EPA is today proposing that sources calculate the baseline by using their current emissions factor in combination with the utilization level from the time period selected. This safeguard insures that no significant loss of environmental protection will result from the proposed change.

As noted, EPA's existing regulations provide that the source may seek to use another time period outside the two preceding years upon a finding by the Administrator (or the permitting authority) that this other period is "more representative" of normal source operations. This provision has been a source of confusion and uneven implementation. The EPA therefore today proposes to eliminate this provision. In other words, a source may simply choose the highest consecutive 12-month period of utilization within the past 10 years and neither States nor EPA will retain any discretion to allow a time period outside this extended range.

3. Protection of Short-term Increments and NAAQS

In discussions of a longer baseline, environmental group representatives linked any change from the existing baseline with the adoption of safeguards for short term NAAQS and PSD increments as well. Essentially, these representatives suggested that the current netting analysis be changed to require a source to go through major NSR when there is a net increase in daily [or weekly or monthly, depending on the emission tracking capability of the source] emissions when past actual emissions are represented by the highest day [or week or month] in the previous year. This step could provide assurances that peak emissions, which could cause violations of short-term NAAQS, would not be allowed to increase without full NSR. Some subgroup members argued that the short-term test should be an air quality screening test rather than an NSR trigger.

The EPA has carefully considered the possibility of adding a short-term "increase" test to the netting calculation. However, EPA has determined not to add this provision for two reasons. First, EPA is concerned that a test that freezes a source at its highest hourly (or daily or weekly) emissions would be too easy to evade. For a short time, sources can and will run at maximum capacity so that the baseline hour or day would likely be nothing less than the source's maximum potential emissions.

Moreover, EPA is not sure that limiting the source to its highest past hourly or daily emissions level will necessarily provide any additional protections to NAAQS, increments or Class I AQRVs. The current regulations already restrict the creditability of some decreases in emissions where the overall netting transaction could jeopardize air quality. In particular, a provision in the definition of "net emissions increase" allows credit for a reduction only to the extent that it has approximately the same qualitative significance for public health and welfare as the increase from the proposed change [e.g., 52.21 (b)(3)(vi)(c)]. In a June 28, 1989 rulemaking (see 54 FR 27286) EPA clarified that aspect of the regulations to require that, despite the absence of a significant net increase in emissions, an applicant proposing to net out of review must demonstrate that the proposed netting transaction will not cause or contribute to an air quality violation before the emissions reduction may be credited.

To ensure that the change to a netting baseline based on the highest year out of the last 120 consecutive months does not adversely impact short (or long) term ambient standards, EPA is proposing a clarifying change to the regulations which specifically requires that, to be creditable for netting purposes, an emissions reduction must be sufficient to prevent the proposed increase from causing or contributing to a violation of NAAQS or PSD increment or result in an adverse impact on AQRVs (including visibility) of Class I areas. As discussed above, this requirement is inherent in EPA's current regulations and, therefore, should already be part of any netting analysis. The EPA also solicits comment on the need to provide such explicit regulatory language to safeguard against netting transactions causing or contributing to violations of a NAAQS, PSD increment or AQRV.

Text of Agency's PAL Approach

F. Plantwide Applicability Limits

The EPA today proposes a new applicability approach for major modifications based on plantwide applicability limits (PALs). The EPA proposes to simplify the NSR major modification applicability process through the use of voluntary, source-specific PALs. The voluntary source-specific PAL is a straight forward, yet flexible approach to determining if an emissions increase occurs from changes to an existing major source. This approach offers benefits to sources, permitting authorities, and the environment.

During the NSR Simplification Workshops and NSR Reform Subcommittee meetings, EPA presented two PAL-based approaches. First, EPA discussed an area-wide PAL applicability system fashioned after Oregon's plant site emission limit (PSEL) program. The EPA originally conceptualized this approach as a State or district wide program that, within the State or district, would require every major source to have a PAL. The EPA also developed and presented a voluntary, source-specific PAL approach, similar to that demonstrated by a Minnesota Manufacturing and Mining (3M) facility in St. Paul, Minnesota, which would allow states the option of setting PALs for one or more sources.

Based in part on Subcommittee discussions of both options, EPA has determined that the voluntary source-specific PAL is a realistic and practical method of providing both flexibility and regulatory certainty to many existing sources, as well as benefits to permitting authorities, while maintaining air quality. Accordingly, EPA today proposes to revise its NSR regulations to provide for this approach as a source-specific option to be used on a voluntary basis. Specifically, the provisions address the authority under which State and Federal agencies may apply the PAL approach, the basis on which to establish PALs, requirements for practicable and federally enforceable limits, assessment of air quality impacts of emissions changes under the PAL, and review of and adjustments to PALs. Other significant proposed changes include deleting all other exclusions that exist in the current regulations for a source under a PAL; changing the triggering event for review for a source

under a PAL to "any change" rather than certain "physical or operational changes;" and adding definitions for "plantwide applicability limit" and for "modification" which provide for review of certain emissions trades under the PAL and of other changes that States may wish to review under minor NSR or other State requirements.

The EPA also seeks comment on area-wide PAL approaches consistent with the source specific voluntary criteria in today's proposal and requests comment on other criteria or minimum requirements for area-wide PALs. The EPA also seeks comment on whether, if at all, States should be allowed in an area-wide system to establish PALs at levels higher than actual emissions. Area-wide PALs would not be mandatory for any area under today's proposal, but a permitting authority may choose to adopt an area-wide PAL so that all major sources in the entire area, classified as nonattainment or attainment for a given pollutant, would take on PALs.

1. Background

a. Minnesota Mining and Manufacturing

In 1992, the Minnesota Mining and Manufacturing (3M) Tape Manufacturing Division Plant in St. Paul, Minnesota proposed a source-wide cap on VOC emissions to the Minnesota Pollution Control Agency (MPCA) in return for the ability to make changes at the facility without triggering PSD review. The 3M plant planned over a 5-year period to make nonroutine physical or operational changes and upgrade equipment. The proposed cap of 4,492 tpy was significantly lower than the source's potential to emit (65,000 tpy), and lower than the 2-year average actual emissions for 1990 and 1991 (5,076 tpy), which reflected the addition in 1990 of thermal exidizers for VOC control. By setting an allowable emissions cap at 4,492 tpy (which would be treated as the source's potential to emit) based on the 1990-1991 average actual annual emissions (5,076 tpy), 3M could make the physical and operational changes contemplated without triggering NSR for a significant net emissions increase.

b. The Oregon Program

The State of Oregon promulgated a PSEL program in 1981, recognizing the "need to establish a more definitive method for regulating increases and decreases in air emissions of air quality permit holders." [Oregon Administrative Rules (OAR), Chapter 340, Division 20 - Department of Environmental Quality 340-20-300] Over a period of 5 years, PSELs for all State and Federal regulated pollutants were incorporated into all Federally enforceable State operating permits as a means of managing airshed capacity.

A PSEL for a facility is established for similar types of emission units rather than for the entire facility. Currently, about 1200 facilities are permitted under the PSEL rule, and Oregon issues about four major NSR permits each year.

The PSELs have both short-term (lb/hr or lb/day) and long-term (tons/year) emission limits. The PSELs are used as the baseline emissions when determining whether a modification at a facility is subject to NSR. Stack testing is the primary method used in determining compliance with the PSEL, but some continuous emission monitors are used as well.

The Oregon PSEL rule differs from the traditional EPA program in that the PSEL rule does not limit consideration of increases and decreases in emissions to a contemporaneous time period when determining whether a significance level has been exceeded. The EPA rules generally limit consideration of increases and decreases to a 5-year contemporaneous time period.

c. Area-wide and Voluntary Source-specific Plantwide Applicability Limits

Under the area-wide approach presented to the Subcommittee, States would not be mandated to adopt a PAL system, but once a State or district determined to adopt the PAL approach, it would be adopted for all sources in the district. Numerous comments were received both in support of this approach and against it. Much of the debate focused on the baseline issue -- the question of the initial level for the PAL. Industry was very concerned that a district or State might set a baseline that confiscates capacity. Environmentalists were concerned that any option that was not based on an actuals emissions baseline would allow sources to make major physical changes that increase actual annual emissions without triggering NSR.

After consideration of the Subcommittee's deliberations, EPA has decided to propose regulatory changes which allow States to set source-specific PALs for individual sources which wish to use a PAL as a NSR applicability alternative. However, while the thrust of the proposed PAL approach is for a voluntary, source-specific approach, EPA's proposed regulations also allow for districts to adopt this applicability approach for all or part of the sources in the area. This area-wide option is, however, built on the same criteria as the source-specific option, including the requirement that the cap be based on the same actual emissions baseline as the individual PAL approach. Thus, EPA proposes to give permitting authorities full discretion as to which sources in the jurisdiction, if any, will be subject to the PAL methodology proposed today.

d. The Benefits and Incentives

The benefits of any PAL approach, as recognized by members of the Subcommittee, include (1) operational flexibility underneath an emissions cap and an increased ability to make changes reacting to market demand, if the permit conditions are appropriately written and the cap is not too restrictive; (2) a correspondingly decreased permitting burden for the source and the permitting authority; (3) an incentive to create room for growth under the capped level of emissions by implementing pollution prevention and other pollution reduction strategies; (4) a likelihood that even when a cap is based on an actual emissions baseline period, emissions not only stay under the levels capped but generally are reduced further; (5) consistency with the title V operating permit program and provisions for allowing emissions trading and alternative scenarios; (6) incentives for improved plant monitoring; (7) certainty created by knowing at what level of emissions a source will be required to undergo NSR thereby eliminating the uncertainty of evaluating a baseline for each modification and determining the contemporaneous increases and decrease and whether a source qualifies under another exclusion or another test of emissions increase; (8) reduction of some of the "paper" emissions in the system and therefore, additional room for growth for new sources; (9) avoidance of a prescriptive technology review by allowing and providing incentives for sources to seek the most cost-effective means of reducing emissions from new emissions units; (10) elimination of unreviewed emission increases that affect air quality because, without a de minimis level established for major modification review, all increases over a cap are reviewed.

After reviewing the comments on this voluntary source-specific PAL approach, EPA believes that the approach offers benefits for air quality, is consistent with statutory mandates for NSR and EPA goals for creating market incentives and pollution prevention incentives as well as other programs, and in general is consistent with the goals of the nonattainment NSR and PSD programs and program reform. Therefore, EPA proposes to revise the NSR regulations to allow States to adopt PAL approaches on a source-by-source basis. Although a source-by-source PAL approach may be implemented in many situations under the current regulations, several issues are not clearly addressed by the current regulations, policy, or practice under the regulations. The EPA believes that regulatory changes would allow for more ease, clarity, and certainty in the implementation of PAL approaches for major modification applicability.

2. The Presentation to the NSR Reform Subcommittee and Today's Proposal.

The EPA proposes that once a PAL is established for the source, the source may make any physical or operational changes at the facility as long as its emissions remain under the limit. Under the proposal, for a source to increase emissions over its source-wide limit, it must first undergo major NSR. Emissions levels set by the PAL would be reevaluated every five years to keep the limits representative of normal operations. The PAL must be Federally and practicably enforceable and must therefore be incorporated into Federally enforceable permits containing compliance methods and related monitoring requirements.

The issues that arise when considering development and implementation of this approach can be placed in five categories: (1) establishing the PAL, (2) changes under the PAL approach, (3) air quality impacts, (4) enforceability, and (5) public participation.

a. Establishing the PAL

The EPA requests comment on five alternatives for establishing the PAL: (1) the current definition of "actual emissions" [see 40 CFR 52.21(b)(21)(iii)]; (2) the current definition of "actual emissions", but add an operating margin (e.g., 10 to 20 percent); (3) the highest 2 years of operation in the 5 years preceding the setting of the PAL; (4) the highest 1-in-10 year test discussed in section III. D. of today's proposal; (5) in nonattainment areas, and for the nonattainment pollutants, any emissions level completely offset and relied upon in attainment demonstrations fully approved by EPA. The first four options are suggested because the first represents the current system and the others provide additional flexibility. Option 5 is an additional potential basis for establishing PAL levels but clearly would be limited to nonattainment areas and to sources whose offsetted levels have been relied upon for air quality planning. The EPA requests comment not only on whether option 5 should be available to establish PAL levels but also whether such levels should be permissible only if established pursuant to a recent major NSR process (e.g., since 1990 or within the past two or five years). The EPA requests comment on these options and any other approaches not suggested here.

There are significant concerns with the emissions levels at which PALs would be established. A restrictive actual emissions level limits the flexibility of sources to grow and operate within a PAL. A high allowable emissions level allows real increases in actual emissions under a PAL without air quality checks and these increases may adversely affect air quality while not providing incentives for pollution prevention and reduction under the PAL. Even more important, under the source-specific PAL approach, demonstrations as to consistency with air quality goals for any source-specific PAL levels may not be an accurate demonstration as to any combination of PALs or allowable levels in an area. When a source is reviewed under major NSR, its emissions levels are reviewed for that specific time. The reviewed emissions levels do not assure that post-modification minor source growth at other facilities or by other types of air pollution sources would not change the impacts of that source's allowable emissions on the area. Under the current regulations, air quality impacts would be reevaluated when a major modification occurs or a minor modification under minor NSR. However, under a PAL approach using allowable emissions levels, the impact would not necessarily be reevaluated, especially where no significant emissions trades occur even within the plant.

The EPA requests comment on the appropriate basis for establishing PAL levels in light of the competing concerns.

b. Changes Under the PAL Approach

The EPA requests comment on several possible scenarios involving changes under the PAL approach. First, sources which wish to increase emissions over the PAL would trigger major NSR. In some instances, the increase will result from the addition of a new unit or physical modification or change in the method of operation of an existing unit. Clearly, these units associated with the increase would have to be reviewed for control technology, apply BACT or LAER, perform air quality impact modeling, and its increase be offset, if applicable. However, the EPA raises for consideration the situation where a source may wish to increase emissions above the PAL as a result of an increase in an overall plant production rate. In this case, it may not be clear which units would have to apply BACT or LAER. The EPA proposes that increases tied to physical or operational changes require that NSR apply to those physical or operational changes that relate to the increase.

Second, the EPA proposes that so long as actual emissions do not exceed PAL emission limits, changes "under" the PAL should not be subject to major NSR. The EPA raises for consideration the possibility that under this proposal major emissions units could be installed or modified under the PAL without any kind of review. The provisions in the proposed regulations allow State and local permitting authorities to maintain or adopt authority to impose minor NSR requirements through SIP provisions or other State requirements, including minor NSR requirements. The provisions also provide the ability for States to adopt this PAL approach in lieu of some or all new source requirements. The EPA also believes that many sources will, in order to stay under the PAL, need to apply good controls to minimize emissions from new and modified units at a capped source.

Third, PALs, once obtained and included in a permit, may be adjusted for a number of reasons. Industry, regulatory agencies, and the public need to understand and know what adjustments to a PAL may be necessary, both on an immediate basis and during some periodic review cycle. The EPA requests comment on why, how, and when PALs should be lowered or increased without major NSR. Such need for adjustments would arise, for example, (1) where technical errors have been made with regard to calculating past actual emissions or potential emissions or emissions factors; (2) when new requirements require a reduction in permitted emissions to "discount" for RACT or other technology requirements such as MACT or SIP-required reductions; (3) to account for the generation of offsets or permanent shutdowns where the State has the authority to remove permanent shutdowns from the emissions inventory after a certain time period; (4) when changes under the PAL might cause or contribute to a violation of a NAAQS, PSD increment or Class I area AQRV; and (5) during periodic review to set the PAL at a level that represents actual emissions and normal operation. A concern was raised about the uncertainty that results from the State review and renewal of the PAL as well as any authority to adjust the PAL. It has been recognized that sources will want to maximize the room for growth under a PAL. However, if there is too frequent opportunity for a downward adjustment to the PAL, a source may be reluctant to accept a PAL for fear of losing any room for growth through the State's ability to make adjustments. The uncertainty may result in very little flexibility to operate and make changes under a PAL.

In the Subcommittee deliberations, a few members were uncomfortable with a number of issues with regard to the changes allowed under the PAL and those which may not be allowed. First, as mentioned, there is some concern that this approach may be building on an existing problem under the current regulations. The current regulations allow sources to net new units and sometimes large modifications out of review, without mandating the application of control technology. The members felt that NSR has two

purposes: first, an air quality purpose for protection of standards and prevention of air quality deterioration, and; second, ensuring that as industrial equipment turns over, new equipment includes the application of new pollution reduction or control strategies or technologies. Some members contended that to allow sources to net out of review without requiring some "good technology" is contrary to the second purpose of NSR. In light of the incentives offered by this approach and the ability of the States to impose technology requirements, EPA requests comment on whether, for new units, to require that States require some control technology or to provide in the Federal regulations an independent mandate for the application of control technology. During the Subcommittee deliberations, EPA sought comment on whether EPA's authority to require technology on new units absent the application of major NSR may be limited under Alabama Power and the Act.

The EPA also requests comment on how to apply the major NSR requirements as a result of an increase not directly associated with a particular modification or physical change to an emissions unit. Major NSR could be applied to: (1) all changes that have occurred under the PAL; (2) all changes that have occurred under the PAL since the last PAL renewal; (3) all changes that have occurred under the PAL in the last five years; (4) only those changes that can be associated with the increase, or (5) the entire facility and BACT or LAER can apply where most appropriately determined, i.e. any uncontrolled units or the less controlled units.

c. Air Quality Impacts

Certain changes under the PAL, such as changes in effective stack parameters, can change a source's impact area, and must therefore be modeled or otherwise assessed to demonstrate protection of NAAQS, increments, and AQRVs. The EPA requests comment on when modeling or other ambient impact assessment should be required, including the usefulness of existing guidance on similar issues (e.g., the Emissions Trading Policy Statement), and what should be done to protect Class I areas.

Changes to emission points within the PAL involving SO_2, nitrogen dioxide (NO_2), carbon monoxide (CO), lead (Pb), or particulates may result in different air quality impacts. The ambient impacts of SO_2, CO, Pb, NO_2 and particulate emissions depend on site- and stack-specific factors such as topography and plume height which are ordinarily evaluated by ambient dispersion modeling. By contrast, the ambient impacts of VOCs and NO_x as ozone precursor emissions are areawide rather than site-specific. Such VOC and NO_x emissions within a broad area are considered comparable, regardless of plume height, topography or related factors. At this time, for purposes of major NSR, VOC-NO_x trading is not generally allowed. For this reason, States must require sources proposing emission point changes to model the new impacts for SO_2, NO_2, CO, Pb, and particulates, to ensure that the emission levels remain consistent with NAAQS, increments, and AQRVs. States may follow the requirements of the Emissions Trading Policy Statement when requiring such modeling. The Emissions Trading Policy Statement requires modeling of changes in emissions of SO_2, CO, Pb or particulates if (a) there is an increase in emissions, (b) the increase is not occurring in the same immediate vicinity of an equivalent decrease, (c) the increase is at a lower plume than the decrease, (d) the source is located near complex terrain, (e) the stacks are not tall enough to avoid downwash, or (f) the trade involves fugitive emissions sources.

d. Enforceability

PALs must be Federally and practically enforceable, and must therefore be incorporated into permits containing compliance methods and related monitoring requirements. General EPA requirements of practical enforceability must be met: sources may be required to meet the requirements of the Enhanced Monitoring rule in 40 CFR part 64. The EPA requests comment on the nature of the necessary conditions to be placed on the source to assure compliance. Considerations include the extent of monitoring required, the method of quantifying emissions, the extent to which limits are unit-specific (as opposed to limits on groups of units), averaging times, alternative operating scenarios, and the interaction between these conditions and title V requirements. The EPA also requests comment on what the permit and enforcement consequences should be of impermissibly exceeding a cap.

In the NSR Subcommittee, concern was raised about the enforceability of PALs. Some felt that the traditional enforcement of unit specific limits allowed enforcement authorities to prioritize enforcement resources on large units or units of most concern due to their contribution to a violation or air quality problem. The perception was that it is a lot easier and more direct to enforce unit-specific limits than plantwide limits. Some disagreed and expressed that plantwide limits are far more manageable than unit-specific limits. Another view is that the current system requires substantially more resources than a PAL system, both for management of a system and for enforceability. Since a PAL system requires more monitoring, generally more information should be available for compliance and enforcement. Additionally, more information should be available on the source's actual emissions. However, also expressed was a concern about requiring too much monitoring for little return on reliability.

The EPA requests comment on whether the PAL would facilitate enforceability, both for government authorities and for the public, and the degree to which sources would more easily comply with and show compliance with PALs rather than unit-specific limits, recognizing that some unit-specific limits will remain in place for purposes of other emissions limits and standards.

e. Public Participation

The Federal NSR permits are subject to public participation requirements. The EPA requests comment on when a PAL permit should undergo public review, including consideration of the following events: initial establishment of a PAL, adjustment of the cap due to technical revision of baseline (e.g., emission factor changes), decreases in the cap due to more stringent Federal or State requirements, BACT/LAER determinations at capped facilities, changes in unit-specific emissions under a PAL (i.e., shifting emissions among units), and PAL renewal. The EPA also requests comment on how title V public participation requirements can be satisfied, and what monitoring and compliance information should be made available to the public, including the process for making it available.

3. Proposed Regulatory Revisions

The proposal would incorporate the PAL approach into the NSR rules by adopting new PAL rules in 40 CFR Sections 51.165a, 51.166a, and 52.21a. The proposal for implementing this approach uses changed the definitions related to major modifications borrowed from 40 CFR 51.165, 51.166 and 52.21. A number of new provisions have been developed to specify the requirements of using a PAL approach. The EPA requests comments on these provisions. This discussion refers to section 52.21a, but the discussion is intended to address the same types of provisions for other NSR rules.

The proposed rules allow the use of a PAL for NSR applicability in lieu of the applicability provisions in 40 CFR Section 52.21. Similarly, revisions to 40 CFR Sections 51.165 and 51.166 are proposed to provide an alternative applicability approach that States may adopt into SIPs to facilitate use of PALs. Under each of these programs, States may choose to adopt or accept delegation of PAL approaches at sources to apply in lieu of the Federal major NSR regulation or to apply in lieu of State SIP minor NSR requirements. When adopting the PAL approach, States may

choose in their SIPs or delegation agreement to adopt the PAL approach on a limited basis. For example, States may choose to adopt the PAL approach only in attainment areas, only in nonattainment areas, or only for certain pollutants in either or both of these areas. States may also choose to allow the PAL approach only for sources with a record of existing emissions or normal operations for at least 2 years, in order to establish a PAL limit based on historical actual emissions. In general, States may be more stringent than Federal requirements, consistent with section 116 of the Act, even under a PAL approach.

Proposed section 52.21a(y)(1) states that the delegation of authority to States must specify which programs, areas, and pollutants section 52.21a will replace when these provisions are applied to a source.

Proposed section 52.21a(b)(20) provides the basis for setting PAL emissions levels. Under the proposed regulation, PAL levels may only be established at actual emission levels representative of normal operation. However, EPA is taking comment on how these provisions may be modified allow PAL emissions levels to be established based on emissions levels that have been completely offset and have been relied upon in an attainment demonstration fully approved by EPA.

Proposed sections 52.21a(c)(2) and (3) provide that emissions limits established under the PAL not only have to be achievable but must be practicably and Federally enforceable.

Proposed section 52.21a(d) incorporates into the PAL approach the criteria for reviewing emissions trades as described in the Emissions Trading Policy Statement.

Proposed section 52.21a(c)(4) specifically provides that the PAL does not authorize bubbling or other changes to unit-specific requirements. Consistent with EPA's Emission Trading Policy Statement, emissions trading, even under a cap approach, does not allow emissions trades to demonstrate compliance with unit-specific requirements.

Proposed section 52.21a(e)(1) requires periodic review of the PAL emissions levels and adjustments to the emissions levels at appropriate times and to address certain events, such as permanent shutdowns, new applicable requirements, technical errors, and other air quality concerns.

Currently, the proposed provisions do not contain any specific provisions for public notice other than those already required for major and minor NSR review. The public participation requirements of parts 70 and 71 will also be taken into account in EPA's consideration of additional public notice requirements for PALs. Public notice and comment may be involved at each part 70 permit renewal; therefore, if adjustments to the PAL are made at that time, public notice is already a required component. A PAL approach that applies only in lieu of major NSR may result in changes at the source triggering minor NSR, at which time the public notice requirements of minor NSR, sections 51.160 - 51.164, may be triggered. The EPA requests comment on whether to build specific public notice requirements into the PAL approach in addition to the ones already provided for in these existing programs. The definition of PAL implies that public notice is required in order to establish the PAL. However, it may not be clearly stated.

Footnotes:

[1] "Potential to emit" is currently defined as the "maximum capacity of a stationary source to emit a pollutant under its physical and operational design." Any physical or operational limitation on the capacity of the source to emit a pollutant, including a permit limitation, is treated as part of its design provided the limitation or its effect on emissions is Federally enforceable. [See current rules 40 CFR 51.165(a)(1)(iii), 51.166(b)(4)]

[2] Roughly speaking, "contemporaneous" emissions increases or decreases are those which have occurred between the date 5 years preceding the proposed physical or operational change and the date that the increase from the change occurs [see 40 CFR 52.21(b)(3)(ii)]. Once a modification is determined to be major, the PSD requirements apply only to those specific pollutants for which there would be a significant net emissions increase [see e.g., 40 CFR 52.21(j)(3) (best available control technology); 40 CFR 52.21(m)(1)(b) (air quality analysis)].

[3] For example, consider a source consisting of an industrial coal-fired boiler, constructed in the late 1960s and therefore "grandfathered" from NSR, which originally had a potential to emit of 1000 tons per year of SO2. Since the mid-1980s, this source may have actually emitted only 500 tons per year (i.e., operated at 50% of its capacity) at reduced utilization due to economic conditions or because the boiler became less efficient as it aged, and hence less economic to operate at full capacity. If the boiler were to be modified through a nonroutine physical change which did not affect the unit's hourly emissions rate, the owner or operator would need either to accept a cap on its post-modification emissions at 539 tons per year (the significant increase level for SO2 is 40 tons per year), or to obtain a major NSR permit if it desires to maintain the ability to operate at 100 percent of its rated capacity. The 500 ton "cushion" between actual and potential emissions that existed prior to the modification would no longer exist.

[4] The regulations define "electric utility steam generating units" as any steam electric generating unit that is constructed for the purpose of supplying more than one-third of its potential electric output capacity and more than 25 megawatts (MW) of electrical output to any utility power distribution system for sale.

[5] In the WEPCO rule, EPA also created a pollution control project exclusion for utilities (discussed in section III(E)) and amended its PSD and nonattainment NSR regulations to implement sections 409 and 415 of title IV of the 1990 Amendments which create special NSPS treatment for certain repowering projects and limited NSR exemptions for temporary and permanent CCT projects, and for certain "very clean" units. EPA also amended its new source performance standard (NSPS) regulations (40 CFR part 60) to allow a utility to use as its pre-change baseline its highest hourly emissions rate achieved during the 5 years prior to the proposed physical or operational change. The changes implementing sections 409 and 415 as well as the NSPS baseline change are not discussed in this package.

[6] Potential emissions are calculated on an hourly basis as the product of the emissions rate or factor of the unit multiplied by its sustainable maximum hourly achievable capacity. Therefore, changes which would not increase either the emissions or the capacity factor of the unit would not trigger major NSR. A source could, however, compensate for an increase in either factor by a commensurate decrease in the other factor such that the maximum hourly emissions would not increase. However, the change cannot involve an increase in the emissions factor if the higher rate or represents a reduction in the level of control at the unit otherwise currently achieved at the unit.

[7] For all of the above tests, EPA realizes that there are many source and emission unit categories for which BACT/LAER determinations do not exist, let alone recent determinations. For these sources, EPA proposes that their level of control be gauged against the control levels associated with BACT/LAER for emission units with similar emission stream characteristics. That is, if the emissions unit were to be undergoing a BACT/LAER review today what technologies would be evaluated and what are the current BACT/LAER levels associated with those technologies? Since this in effect requires the permitting authority to essentially engage in a BACT/LAER review in order to qualify a unit for this exclusion, EPA is asking for comment on other approaches for qualifying units.

File
Cleveland Fuel.
Illum.

FACSIMILE REQUEST AND COVER SHEET

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Air and Radiation Division
Air Enforcement Branch
77 West Jackson Boulevard
Chicago, Illinois 60604

TO Robert Hodanbosi, Acting Chief

OFFICE Division of Air Pollution Control - OEPA

PHONE # _____ MACHINE # 614-644-3681

FROM William L. MacDowell, Chief, AEB, RDS

ORGANIZATION USEPA, REGION 5 ARD, AEB, RDS

PHONE # (312) 886-6798

DATE JUN 17 1992 NUMBER OF PAGES INCLUDING THIS COVER SHEET -5-

COMMENTS: _____

INFORMATION FOR SENDING FACSIMILE MESSAGES TO THE AIR AND RADIATION DIVISION

EQUIPMENT	FACSIMILE NUMBER	VERIFICATION NUMBER
Panafax UF-260	FTS: 8-886-0617 Comm: (312) 886-0617 OR FTS: 8-886-5824 Comm: (312) 886-5824	Call Recipient

PLEASE REMOVE ALL STAPLES !!!!!!!!!

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Office of Air Quality Planning and Standards
Research Triangle Park, North Carolina 27711

May 26, 1992

MEMORANDUM

SUBJECT: Applicability of Prevention of Significant Deterioration (PSD) and New Source Performance Standards (NSPS) to the Cleveland Electric, Incorporated, Plant in Willoughby, Ohio

FROM: Edward J. Lillis, Chief
Permits Programs Branch, AQMD (MD-15)

TO: George T. Czerniak, Chief
Air Enforcement Branch, Region V

This memorandum responds to your request for a written applicability determination for a Cleveland Electric, Incorporated, facility in Willoughby, Ohio. As discussed below, my staff has determined that this Cleveland Electric facility is subject to a 100 tons per year (tpy), major source applicability threshold for the PSD requirements at 40 CFR 51.21. If this facility has commenced construction with a minor source construction permit from Ohio, but without undergoing new source review (NSR), as required by 40 CFR 52.21, the source may be in violation of Federal PSD requirements. At this time, the Cleveland Electric Plant does not appear to be subject to the current emissions guideline for municipal waste combustors or NSPS of 40 CFR Part 60, subparts Ca and Ea, respectively. This response has been coordinated with the Compliance Monitoring Branch of the Stationary Source Compliance Division (SSCD), to whom your applicability request was addressed, and with the Standards Development Branch of the Emission Standards Division (ESD) on the applicability of NSPS and emissions guidelines.

In reviewing the information forwarded to our office, we have determined that, for PSD applicability purposes, the Cleveland Electric facility is both a municipal waste incinerator and a fuel conversion plant, as listed at 40 CFR 52.21(b)(1)(c)(iii), and would be major if the source "...emits, or has the potential to emit, 100 tpy of any pollutant subject to regulation under the (Clean Air) Act". The facility appears to meet the criteria for both categories by disposing of municipal

waste using combustion and by producing a low heat value fuel gas. While there are no definitions in the PSD regulations for "municipal waste incinerator," "fuel conversion plant," and other categories listed as subject to the 100 tpy, major source threshold, the Environmental Protection Agency (EPA) has relied on case-by-case determinations in assessing source applicability. These assessments are based on precedents established by NSPS and other regulatory definitions, as well as technical analysis of the character and functions of both the proposed source and the listed source categories. We have used these guidelines in determining that the Cleveland Electric plant is considered listed under two source categories for which the lower PSD applicability threshold applies.

The NSPS regulations define "municipal waste combustor" at 40 CFR 60.51a to mean "... any device that combusts solid, liquid, or gasified (municipal solid waste) including, but not limited to, field-erected incinerators (with or without heat recovery), modular incinerators (starved air or excess air), furnaces (whether suspension-fired, grate-fired, mass-fired, or fluidized bed-fired) and gasification/combustion units." The emissions guideline of subpart Ca also incorporates this definition by reference (40 CFR 60.31a). On page 10 of Cleveland Electric's December 20, 1991 permit application submittal, the source is described as consisting of seven units, charging 50 tons per day (tpd) per unit, "...converting municipal solid waste into...fuel gas." For NSPS purposes, the Cleveland Electric source is a municipal waste combustor and would be subject to the NSPS standards of 40 CFR Part 60, subpart Ea, if each unit were not below the 250 tpd of refuse combustion capacity per unit applicability threshold of subpart Ea [40 CFR 60.50a(a)].

A municipal waste incinerator "combusts" solid waste and thus is functionally synonymous with municipal waste combustor. Accordingly, EPA has adopted the NSPS definition of municipal waste combustor for determining if a source is subject to the 100 tpy applicability threshold for PSD in section 169(1) of the CAA. Section 169(1), as amended by Section 305(b) of the CAA Amendments of 1990 [P.L. 101-549, sec. 305(b)], lists "municipal incinerators capable of charging more than 50 tons of refuse per day" as being subject to the 100 ton emissions threshold.[1] Under EPA's sourcewide plant definition [40 CFR 52.21(b)(5 and 6)], the 50 tpd charging rate applies to the sum of all units at the Cleveland Electric facility (which will be capable of

[1] The EPA considers the revised definition to be effective by operation of law on November 15, 1990.

charging a total of 350 tons of refuse per day). Therefore, the Cleveland Electric facility will be a major source for PSD purposes if the source emits, or has the potential to emit, 100 tpy of any pollutant regulated under the CAA [except HAP's listed under §112(b) of the CAA].

The production of low heat value fuel gas at the Cleveland Electric facility also classifies the source as a fuel conversion plant. Fuel conversion plants obviously include those plants which accomplish a change in state (e.g., solid to liquid to gas) for a fuel. This definition includes conversion of the following fuels: fossil (e.g., coal or oil shale); biomass (e.g., wood or peat); and anthropogenic (e.g., municipal waste derived fuel and inorganic fuel). The majority of such sources are likely to accomplish these changes through either gasification, liquefaction, or solidification. The category of fuel conversion plants may include, but is not limited to, some types of sources within standard industrial classifications 1311, 2819, 2969, 2421, and 2999. Generally, however, applicability for this source category is determined by whether a facility changes the state (e.g., solid to gas) or form (e.g., process sawdust into a pellet) of a fuel. Therefore, the Cleveland Electric facility fits into the fuel conversion plant category as well. In both cases, as a municipal waste incinerator and as a fuel conversion plant, the source is major and subject to PSD requirements if the source has the potential to emit 100 tpy of a regulated pollutant other than a HAP.

If you have any questions concerning our PSD applicability determination, please contact Bill Lamason of my staff at (919) 541-5374. Questions concerning NSPS should be directed to Walt Stevenson, ESD, at (919) 541-5264. On compliance issues, you may contact Clara Poffenberger, SSCD, at (703) 308-8709.

cc: NSR Contacts, EPA Regions I-X
K. Berry, AQMD
C. Poffenburger, SSCD
W. Stevenson, ESD
B. Tyndall, OGC
J. Domike, OE
B. Lamason, PPB

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
230 SOUTH DEARBORN ST.
CHICAGO, ILLINOIS 60604

7 NOV 1988

REPLY TO THE ATTENTION OF: (5RA-14)

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Richard L. Shank Ph.D,
Director
Ohio Environmental Protection Agency
P.O. Box 1049
1800 WaterMark Drive
Columbus, Ohio 43266

'88 NOV 14 AM 10:25

Dear Dr. Shank:

The State of Ohio is implementing the prevention of significant deterioration (PSD) program which was delegated under 40 CFR 52.21(u) in full to Ohio on May 1, 1980. The delegation was made after United States Environmental Protection Agency (USEPA) found the State program contained adequate procedures and authority to issue and enforce construction permits for air pollution sources consistent with the PSD rules.

This letter amends the delegation in order to incorporate revised terms and conditions which arise from policy revisions. Furthermore, since the State is acting on behalf of the Administrator in this Federal delegation, the delegation is being revised to assist the State to achieve more closely the Administrator's goal of preventing significant deterioration of air quality.

Therefore, in accordance with 40 CFR 52.21(u), the USEPA hereby delegates to the State of Ohio authority and responsibility to implement the PSD regulations in accordance with 40 CFR 52.21, as they may be amended and in accordance with the appropriate permit review requirements in 40 CFR 124 Subparts A and C. This delegation is also subject to all USEPA policy guidance and determinations on 40 CFR 52.21, 40 CFR 124 and other applicable regulations.

This delegation is based upon the following terms and conditions:

1. Authority is delegated to the State of Ohio for all sources located in the State subject to review for PSD. This delegated authority includes all source categories listed in 40 CFR 52.21 for each pollutant regulated under the Clean Air Act. With respect to any PSD permits issued by the USEPA, this delegation includes authority to implement the technical, administrative, and enforcement provisions of the PSD regulations. It also includes authority to make permit amendments. This delegation does not include any authority found in 40 CFR 52.21(g) with respect to redesignating areas.

2. The primary responsibility for implementation and enforcement of the PSD regulations in the State of Ohio will rest with the Ohio Environmental Protection Agency (OEPA).

   a. The OEPA will enforce the provisions and regulations that pertain to the PSD program, except in those cases where the rules or policies of the State are more stringent; in which case, the State may elect to implement the more stringent requirements.

   b. OEPA will follow the new source review guidance which has been provided to the State, including the guidance with respect to making best available control technology determinations, and all future guidance representing regional and national policy, including but not limited to guidance on air quality impact modeling.

   c. If the State enforces the delegated provisions in a manner inconsistent with the terms and conditions of this delegation or the Clean Air Act, USEPA may exercise its enforcement authority contained in the Clean Air Act with respect to sources within the State of Ohio subject to the PSD provisions.

   d. This delegation may be amended by the Regional Administrator at any time to assure the implementation of national policy or regulation changes.

   e. No authority under this delegation may be redelegated without the approval of the USEPA Regional Administrator.

3. If the Regional Administrator determines that the State is not implementing or enforcing the PSD program or has not implemented the requirements or guidance with respect to a specific permit in accordance with the terms and conditions of this delegation, the requirements of 40 CFR 52.21, 40 CFR 124, or the Clean Air Act, this delegation may be revoked in whole or in part, after consultation with the OEPA. Any such revocation shall be effective as of the date specified in a Notice of Revocation to the State. Nothing in this paragraph shall preclude USEPA from exercising its enforcement authority, as provided for in paragraph 2.c above.

4. The permit appeal provisions in 40 CFR 124.19(a) shall apply to all appeals to the Administrator on permits issued by the OEPA under this delegation. The provisions of 40 CFR 124.19(b) apply to permits which the Administrator decides to review. The administration of the appeal procedures in 40 CFR 124.19(a) and (b) is not delegated to the State.

5. In accordance with 40 CFR 124.15, upon the issuance of a PSD permit, the State shall notify each person who submitted written comments and each person who requested a notice of the final permit decision. The notice shall include a reference to the procedures in 40 CFR 124.19 for appealing a PSD permit.

6. In accordance with 40 CFR 124.42(a), the State shall promptly provide notice to the Federal Land Manager after receiving a complete application for any major PSD stationary source or major PSD modification whose emissions would affect a Class I area.

7. For purposes of implementing the Federal permit appeal provisions under this delegation and in accordance with 40 CFR 124.15 and 124.20, if there is a public comment requesting a change in a preliminary determination or draft permit conditions, the final permit issued by OEPA is required to contain statements which indicate that for Federal PSD purposes and in accordance with 40 CFR 124.15, 124.19 and 124.20, (1) the effective date of the permit is 30 days after the service of notice of the final decision to issue, modify, or revoke and reissue the permit unless the service of notice is by mail in which case the effective date of the permit shall be 33 days after the service of notice; and (2) if an appeal is made to the Administrator, the effective date of the permit is suspended until such time as the appeal is resolved or denied.

8. Permits issued under this delegation are required to contain language stating that the PSD permit is issued after determining that the Federal PSD requirements have been satisfied. This requirement also applies to any operating permits issued to a PSD source by the State in implementing the new source program.

9. The public notice required by the PSD regulations must state that the proposed permit is being reviewed as a PSD permit. The notice must indicate which of the regulated pollutants was covered by the permit review and which toxic materials, if any, were considered in the control technology review. The notice must include, where an increment exists, the amount of increment consumed by the proposed source, the total increment consumed, and the amount of unused increment remaining in the area of maximum impact.

10. The OEPA must allow for the provisions of 40 CFR 52.21(u)(4) to be met with regard to sources or modifications constructing in class III areas.

11. For purposes of national consistency, prior USEPA concurrence is to be obtained on matter involving the interpretation of Sections 160-169 of the Clean Air Act, of 40 CFR 52.21, and of 40 CFR 124 to the extent that implementation, review, administration or enforcement of these Sections have not been covered by USEPA determinations or guidance sent to the OEPA.

12. The OEPA and USEPA will develop a communication system which accomplishes the following:

    a. The OEPA will report to the USEPA the compliance status on a continuing basis of sources which have received a PSD permit from either OEPA or USEPA prior to this delegations. The existing quarterly reporting system should be used.

    b. The OEPA will (1) forward by certified mail to the USEPA at the start of the public comment period a summary of the findings related to each PSD application and the justification for the OEPA's preliminary determination, and (2) forward to USEPA a copy of the PSD application upon request when an application has been determined to be complete. Consistent with the obligations identified in 40 CFR 124.13 if there are comments or concerns about the pending PSD permit, USEPA will communicate these comments and concerns to the OEPA, as soon as possible, before the closing of the public comment period.

    c. The OEPA will forward to USEPA by certified mail copies of the final actions on PSD permit applications on the day of issuance.

d. A copy of all public comments, except for USEPA comments, with respect to a preliminary determination or draft permit conditions shall be forwarded to Region V upon the issuance of a permit.

13. The State will at no time grant any waivers to the permit requirements, approve any compliance schedule, or issue any administrative order which violates any presently effective PSD provisions.

14. This PSD delegation supersedes the previously delegated authority contained in the May 1, 1980, letter from the Regional Administrator.

15. In the event that the State is unwilling or unable to enforce a provision of this delegation with respect to a source subject to the PSD regulations, the OEPA will immediately notify the Regional Administrator. Failure to notify the Regional Administrator does not preclude USEPA from exercising its enforcement authority.

A notice announcing this delegation will be published in the Federal Register in the near future. Since this delegation is effective upon the date of this letter, there is no requirement that the OEPA notify USEPA of its acceptance. Unless USEPA receives notice from the OEPA of objections within 10 days of the receipt of this letter, the State will have been deemed to have accepted the terms and conditions of this delegation.

Sincerely yours,

Francis M. Covington

for Valdas V. Adamkus
Regional Administrator

mont), John F. Kennedy Federal Building, Boston, Mass. 02203.

Region II (New York, New Jersey, Puerto Rico, Virgin Islands) Federal Office Building, 26 Federal Plaza (Foley Square), New York, NY 10007.

Region III (Delaware, District of Columbia, Pennsylvania, Maryland, Virginia, West Virginia) Curtis Building, Sixth and Walnut Streets, Philadelphia, PA 19106.

Region IV (Alabama, Florida, Georgia, Mississippi, Kentucky, North Carolina, South Carolina, Tennessee) Suite 300, 1421 Peachtree Street, Atlanta, GA 30309.

Region V (Illinois, Indiana, Minnesota, Ohio, Wisconsin) Federal Building, 230 South Dearborn, Chicago, Illinois 60604.

Region VI (Arkansas, Louisiana, New Mexico, Oklahoma, Texas) 1600 Paterson Street, Dallas, TX 75201.

Region VII (Iowa, Kansas, Missouri, Nebraska) 1735 Baltimore Street, Kansas City, MO 64108.

Region VIII (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming) 916 Lincoln Towers, 1860 Lincoln Street, Denver, CO 80203.

Region IX (Arizona, California, Hawaii, Nevada, Guam, American Samoa) 100 California Street, San Francisco, CA 94111.

Region X (Washington, Oregon, Idaho, Alaska) 1200 Sixth Avenue, Seattle, WA 98101.

§ 52.17 Severability of provisions.

The provisions promulgated in this part and the various applications thereof are distinct and severable. If any provision of this part or the application thereof to any person or circumstances is held invalid, such invalidity shall not affect other provisions or application of such provision to other persons or circumstances which can be given effect without the invalid provision or application.

§ 52.18 Abbreviations.

Abbreviations used in this part shall be those set forth in Part 60 of this chapter.

§ 52.19 Revision of plans by Administrator.

After notice and opportunity for hearing in each affected State, the Administrator may revise any provision of an applicable plan, including but not limited to provisions specifying compliance schedules, emission limitations, and dates for attainment of national standards; if:

(a) The provision was promulgated by the Administrator, and

(b) The plan, as revised, will be consistent with the act and with the requirements applicable to implementation plans under Part 51 of this chapter.

§ 52.20 Attainment dates for national standards.

Each subpart contains a section which specifies the latest dates by which national standards are to be attained in each region in the State. An attainment date which only refers to a month and a year (such as July 1975) shall be construed to mean the last day of the month in question. However, the specification of attainment dates for national standards does not relieve any State from the provisions of Subpart N of this chapter which require all sources and categories of sources to comply with applicable requirements of the plan—

[52.20 introductory paragraph amended by 51 FR 40675, November 7, 1986]

(a) As expeditiously as practicable where the requirement is part of a control strategy designed to attain a primary standard, and

(b) Within a reasonable time where the requirement is part of a control strategy designed to attain a secondary standard.

§ 52.21 Prevention of significant deterioration of air quality.

(a) *Plan disapproval.* The provisions of this section are applicable to any State implementation plan which has been disapproved with respect to prevention of significant deterioration of air quality in any portion of any State where the existing air quality is better than the national ambient air quality standards. Specific disapprovals are listed where applicable, in Subparts B through DDD of this part. The provisions of this section have been incorporated by reference into the applicable implementation plans for various States, as provided in Subparts B through DDD of this part. Where this section is so incorporated, the provisions shall also be applicable to all lands owned by the Federal Government and Indian Reservations located in such State. No disapproval with respect to a State's failure to prevent significant deterioration of air quality shall invalidate or otherwise affect the obligations of States, emission sources, or other persons with respect to all portions of plans approved or promulgated under this part.

(b) *Definitions.* For the purposes of this section:

(1) (i) "Major stationary source" means:

(a) Any of the following stationary sources of air pollutants which emits, or has the potential to emit, 100 tons per year or more of any pollutant subject to regulation under the Act: Fossil fuel-fired steam electric plants of more than 250 million British thermal units per hour heat input, coal cleaning plants (with thermal dryers), kraft pulp mills, portland cement plants, primary zinc smelters, iron and steel mill plants, primary aluminum ore reduction plants, primary copper smelters, municipal incinerators capable of charging more than 250 tons of refuse per day, hydrofluoric, sulfuric, and nitric acid plants, petroleum refineries, lime plants, phosphate rock processing plants, coke oven batteries, sulfur recovery plants, carbon black plants (furnace process), primary lead smelters, fuel conversion plants, sintering plants, secondary metal production plants, chemical process plants, fossil fuel boilers (or combinations thereof) totaling more than 250 million British thermal units per hour heat input, petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels, taconite ore processing plants, glass fiber processing plants, and charcoal production plants;

(b) Notwithstanding the stationary source size specified in paragraph (b)(1)(i) of this section, any stationary source which emits, or has the potential to emit, 250 tons per year or more of any air pollutant subject to regulation under the Act; or

(c) Any physical change that would occur at a stationary source not otherwise qualifying under paragraph (b)(1) of this section, as a major stationary source, if the changes would constitute a major stationary source by itself.

(ii) A major stationary source that is major for volatile organic compounds shall be considered major for ozone.

[52.21(b)(1)(iii) added by 49 FR 43209, October 26, 1984]

(iii) The fugitive emissions of a stationary source shall not be included in deter-

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mining for any of the purposes of this source, unless the source belongs to one of the following categories of stationary sources:

(a) Coal cleaning plants (with thermal dryers);

(b) Kraft pulp mills;
(c) Portland cement plants;
(d) Primary zinc smelters;
(e) Iron and steel mills;
(f) Primary aluminum ore reduction plants;
(g) Primary copper smelters;
(h) Municipal incinerators capable of charging more than 250 tons of refuse per day;
(i) Hydrofluoric, sulfuric, or nitric acid plants;
(j) Petroleum refineries;
(k) Lime plants;

(l) Phosphate rock processing plants;
(m) Coke oven batteries;
(n) Sulfur recovery plants;
(o) Carbon black plants (furnace process);
(p) Primary lead smelters;
(q) Fuel conversion plants;
(r) Sintering plants;
(s) Secondary metal production plants;

(t) Chemical process plants;

(u) Fossil-fuel boilers (or combination thereof) totaling more than 250 million British thermal units per hour heat input;

(v) Petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels;
(w) Taconite ore processing plants;
(x) Glass fiber processing plants;
(y) Charcoal production plants;
(z) Fossil fuel-fired steam electric plants of more that 250 million British thermal units per hour heat input." and
(aa) Any other stationary source category which, as of August 7, 1980, is being regulated under section 111 or 112 of the Act.

(2) (i) "Major modification" means any physical change in or change in the method of operation of a major stationary source that would result in a significant net emissions increase of any pollutant subject to regulation under the Act.

(ii) Any net emissions increase that is significant for volatile organic compounds shall be considered significant for ozone.

(iii) A physical change or change in the method of operation shall not include:

(a) Routine maintenance, repair and replacement;

(b) Use of an alternative fuel or raw material by reason of an order under sections 2 (a) and (b) of the Energy Supply and Environmental Coordination Act of 1974 (or any superseding legislation) or by reason of a natural gas curtailment plant pursuant to the Federal Power Act;

(c) Use of an alternative fuel by reason of an order or rule under section 125 of the Act;

(d) Use of an alternative fuel at a steam generating unit to the extent that the fuel is generated from municipal solid waste;

(e) Use of an alternative fuel or raw material by a stationary source which:

(1) The source was capable of accommodating before January 6, 1975, unless such change would be prohibited under any federally enforceable permit condition which was established after January 6, 1975 pursuant to 40 CFR 52.21 or under regulations approved pursuant to Subpart I or 40 CFR 51.166; or

[52.21(b)(2)(iii)*(e)(1)* and *(2)* amended by 51 FR 40675, November 7, 1986]

(2) The source is approved to use under any permit issued under 40 CFR 52.21 or under regulations approved pursuant to 40 CFR 51.166;

(f) An increase in the hours of operation or in the production rate, unless such change would be prohibited under any federally enforceable permit condition which was established after January 6, 1975, pursuant to 40 CFR 52.21 or under regulations approved pursuant to Subpart I or 40 CFR 51.166.

[52.21(b)(2)(iii)*(f)* amended by 51 FR 40675, November 7, 1986]

(g) Any change in ownership at a stationary source.

(3) (i) "Net emissions increase" means the amount by which the sum of the following exceeds zero:

(a) Any increase in actual emissions from a particular physical change or change in method of operation at a stationary source; and

(b) Any other increases and decreases in actual emissions at the source that are contemporaneous with the particular change and are otherwise creditable.

(ii) An increase or decrease in actual emissions is contemporaneous with the increase from the particular change only if it occurs between:

(a) The date five years before construction on the particular change commences; and

(b) The date that the increase from the particular change occurs.

(iii) An increase or decrease in actual emissions is creditable only if the Administrator has not relied on it in issuing a permit for the source under this section, which permit is in effect when the increase in actual emissions from the particular change occurs.

(iv) An increase or decrease in actual emissions of sulfur dioxide, particulate matter, or nitrogen oxides which occurs before the applicable minor source baseline date is creditable only if it is required to be considered in calculating the amount of maximum allowable increases remaining available.

[52.21(b)(3)(iv) amended by 53 FR 40670, October 17, 1988]

(v) An increase in actual emissions is creditable only to the extent that the new level of actual emissions exceeds the old level.

(vi) A decrease in actual emissions is creditable only to the extent that:

(a) The old level of actual emission or the old level of allowable emission, whichever is lower, exceeds the new level of actual emissions;

(b) It is federally enforceable at and after the time that actual construction on the particular change begins; and

(c) It has approximately the same qualitative significance for public health and welfare as that attributed to the increase from the particular change.

(vii) [Reserved]

(viii) An increase that results from a physical change at a source occurs when the emissions unit on which construction occurred becomes operational and begins to emit a particular pollutant. Any replacement unit that requires shakedown becomes operational only after a reasonable shakedown period, not to exceed 180 days.

(4) "Potential to emit" means the maximum capacity of a stationary source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or

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amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is federally enforceable. Secondary emissions do not count in determining the potential to emit of a stationary source.

(5) "Stationary source" means any building, structure, facility, or installation which emits or may emit any air pollutant subject to regulation under the Act.

(6) "Building, structure, facility, or installation" means all of the pollutant-emitting activities which belong to the same industrial grouping, are located on one or more contiguous or adjacent properties, and are under the control of the same person (or persons under common control) except the activities of any vessel. Pollutant-emitting activities shall be considered as part of the same industrial grouping if they belong to the same "Major Group" (i.e., which have the same first two digit code) as described in the *Standard Industrial Classification Manual, 1972*, as amended by the 1977 Supplement (U. S. Government Printing Office stock numbers 4101-0066 and 003-005-00176-0, respectively).

(7) "Emissions unit" means any part of a stationary source which emits or would have the potential to emit any pollutant subject to regulation under the Act.

(8) "Construction" means any physical change or change in the method of operation (including fabrication, erection, installation, demolition, or modification of an emissions unit) which would result in a change in actual emissions.

(9) "Commence" as applied to construction of a major stationary source or major modification means that the owner or operator has all necessary preconstruction approvals or permits and either has:

(i) Begun, or caused to begin, a continuous program of actual on-site construction of the source, to be completed within a reasonable time; or

(ii) Entered into binding agreements or contractual obligations, which cannot be cancelled or modified without substantial loss to the owner or operator, to undertake a program of actual construction of the source to be completed within a reasonable time.

(10) "Necessary preconstruction approvals or permits" means those permits or approvals required under federal air quality control laws and regulations and those air quality control laws and regulations which are part of the applicable State Implementation Plan.

(11) "Begin actual contruction" means, in general, initiation of physical on-site construction activities on an emissions unit which are of a permanent nature. Such activities include, but are not limited to, installation of building supports and foundations, laying underground pipework and construction of permanent storage structures. With respect to a change in method of operations, this term refers to those on-site activites other than preparatory activities which mark the initiation of the change.

(12) "Best available control technology" means an emissions limitation (including a visible emission standard) based on the maximum degree of reduction for each pollutant subject to regulation under Act which would be emitted from any proposed major stationary source or major modification which the Administrator, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such source or modification through application of production processes or available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of such pollutant. In no event shall application of best available control technology result in emissions of any pollutant which would exceed the emissions allowed by any applicable standard under 40 CFR Parts 60 and 61. If the Administrator determines that technological or economic limitations on the application of measurement methodology to a particular emissions unit would make the imposition of an emissions standard infeasible, a design, equipment, work practice, operational standard, or combination thereof, may be prescribed instead to satisfy the requirement for the application of best available control technology. Such standard shall, to the degree possible, set forth the emissions reduction achievable by implementation of such design, equipment, work practice or operation, and shall provide for compliance by means which achieve equivalent results.

(13)(i) "Baseline concentration" means that ambient concentration level which exists in the baseline area at the time of the applicable minor source baseline date. A baseline concentration is determined for each pollutant for which a baseline date is established and shall include:

(*a*) The actual emissions representative of sources in existence on the applicable minor source baseline date, except as provided in paragraph (b)(13)(ii) of this section:

(*b*) The allowable emissions of major stationary sources which commenced construction before the major source baseline date but were not in operation by the applicable minor source baseline date.

[52.21(b)(13)(i) amended by 53 FR 40670, October 17, 1988]

(ii) The following will not be included in the baseline concentration and will affect the applicable maximum allowable increase(s):

[52.21(b)(13)(ii)(*a*) and (*b*) amended, (14)(i) revised, new (ii) added and former (ii) redesignated as (iii) by 53 FR 40670, October 17, 1988]

(*a*) Actual emissions from any major stationary source on which construction commenced after the major source baseline date; and

(*b*) Actual emissions increases and decrease at any stationary source occurring after the minor source baseline date.

(14)(i) "Major source baseline date" means:

(*a*) In the case of particulate matter and sulfur dioxide, January 6, 1975, and

(*b*) In the case of nitrogen dioxide, February 8, 1988.

(ii) "Minor source baseline date" means the earliest date after the trigger date on which a major stationary source or a major modification subject to 40 CFR 52.21 or to regulations approved pursuant to 40 CFR 51.166 submits a complete application under the relevant regulations. The trigger date is:

(*a*) In the case of particulate matter and sulfur dioxide, August 7, 1977, and

(*b*) In the case of nitrogen dioxide, February 8, 1988.

(iii) The baseline date is established for each pollutant for which increments or other equivalent measures have been established if:

(a) The area in which the proposed source or modification would construct is designated as attainment or unclassifiable under section 107(d)(1) (D) or (E) of the Act for the pollutant on the date of its complete application under 40 CFR 52.21; and

(b) In the case of a major stationary source, the pollutant would be emitted in significant amounts, or, in the case of a major modification, there would be a significant net emissions increase of the pollutant.

(15)(i) "Baseline area" means any intrastate area (and every part thereof) designated as attainment or unclassifiable under section 107(d)(1) (D) or (E) of the Act in which the major source or major modification establishing the minor source baseline date would construct or would have an air quality impact equal to or greater than 1 $\mu g/m^3$ (annual average) of the pollutant for which the minor source baseline date is established.

[52.21(b)(15)(i) amended by 53 FR 40670, October 17, 1988]

(ii) Area redesignations under section 107(d)(1) (D) or (E) of the Act cannot intersect or be smaller than the area of impact of any major stationary source or major modification which:

(a) Establishes a minor source baseline date; or

[52.21(b)(15)(ii)(a) amended by 53 FR 40670, October 17, 1988]

(b) Is subject to 40 CFR 52.21 and would be constructed in the same state as the state proposing the redesignation.

(16) "Allowable emissions" means the emissions rate of a stationary source calculated using the maximum rated capacity of the source (unless the source is subject to federally enforceable limits which restrict the operating rate, or hours of operation, or both) and the most stringent of the following:

(i) The applicable standards as set forth in 40 CFR Parts 60 and 61;

(ii) The applicable State Implemenation Plan emissions limitation, including those with a future compliance date; or

(iii) The emissions rate specified as a federally enforceable permit condition, including those with a future compliance date.

(17) "Federally enforceable" means all limitations and conditions which are enforceable by the Administrator, including those requirements developed pursuant to 40 CFR Parts 60 and 61, requirements within any applicable State implementation plan, any permit requirements established pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR Part 51, Subpart I, including operating permits issued under an EPA-approved program that is incorporated into the State implementation plan and expressly requires adherence to any permit issued under such program.

[52.21(b)(17) amended by 51 FR 40675, November 7, 1986; revised by 54 FR 27285, June 28, 1989]

(18) "Secondary emissions" means emissions which would occur as a result of the construction or operation of a major stationary source or major modification, but do not come from the major stationary source or major modification itself. For the purpose of this section, secondary emissions must be specific, well defined, quantifiable, and impact the same general area as the stationary source or modification which causes the secondary emissions. Secondary emissions include emissions from any offsite support facility which would not be constructed or increase its emissions except as a result of the construction or operation of the major stationary source or major modification. Secondary emissions do not include any emissions which come directly from a mobile source, such as emissions from the tailpipe of a motor vehicle, from a train, or from a vessel.

[52.21(b)(18) amended by 47 FR 27560, June 25, 1982]

(19) "Innovative control technology" means any system of air pollution control that has not been adequately demonstrated in practice, but would have a substantial likelihood of achieving greater continuous emissions reduction than any control system in current practice or of achieving at least comparable reductions at lower cost in terms of energy, economics, or nonair quality environmental impacts.

(20) "Fugitive emissions" means those emissions which could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening.

(21) (i) "Actual emissions" means the actual rate of emissions of a pollutant from an emissions unit, as determined in accordance with paragraphs (b)(21) (ii) through (iv) of this section.

(ii) In general, actual emissions as of a particular date shall equal the average rate, in tons per year, at which the unit actually emitted the pollutant during a two-year period which precedes the particular date and which is representative of normal source operation. The Administrator shall allow the use of a different time period upon a determination that it is more representative of normal source operation. Actual emissions shall be calculated using the unit's actual operating hours, production rates, and types of materials processed, stored, or combusted during the selected time period.

(iii) The Administrator may presume that source-specific allowable emissions for the unit are equivalent to the actual emissions of the unit.

(iv) For any emissions unit which has not begun normal operations on the particular date, actual emissions shall equal the potential to emit of the unit on that date.

(22) "Complete" means, in reference to an application for a permit, that the application contains all of the information necessary for processing the application.

(23) (i) "Significant" means, in reference to a net emissions increase or the potential of a source to emit any of the following pollutants, a rate of emissions that would equal or exceed any of the following rates:

[52.21(b)(23)(i) amended by 52 FR 24712, July 1, 1987]

Pollutant and Emissions Rate

Carbon monoxide: 100 tons per year (tpy)
Nitrogen oxides: 40 tpy
Sulfur dioxide: 40 tpy
Particulate matter: 25 tpy of particulate matter emissions; 15 tpy of PM_{10} emissions.
Ozone: 40 tpy of volatile organic compounds
Lead: 0.6 tpy
Asbestos: 0.007 tpy
Beryllium: 0.0004 tpy
Mercury: 0.1 tpy
Vinyl chloride: 1 tpy
Fluorides: 3 tpy
Sulfuric acid mist: 7 tpy
Hydrogen sulfide (H_2S): 10 tpy
Total reduced sulfur (including H_2S): 10 tpy
Reduced sulfur compounds (including H_2S): 10 tpy

(ii) "Significant" means, in reference to a net emissions increase or the potential of a source to emit a pollutant

[Sec. 52.21(b)(23)(ii)]

subject to regulation under the Act that paragraph (b)(23)(i) of this section, does not list, any emissions rate.

(iii) Notwithstanding paragraph (b)(23)(i) of this section, "significant" means any emissions rate or any net emissions increase associated with a major stationary source or major modification, which would construct within 10 kilometers of a Class I area, and have an impact on such area equal to or greater than 1 $\mu g/m^3$, (24-hour average).

(24) "Federal Land Manager" means, with respect to any lands in the United States, the Secretary of the department with authority over such lands.

(25) "High terrain" means any area having an elevation 900 feet or more above the base of the stack of a source.

(26) "Low terrain" means any area other than high terrain.

(27) "Indian Reservation" means any federally recognized reservation established by Treaty, Agreement, executive order, or act of Congress.

(28) "Indian Governing Body" means the governing body of any tribe, band, or group of Indians subject to the jurisdiction of the United States and recognized by the United States as possessing power of self government.

(29) "Adverse impact of visibility" means visibility impairment which interferes with the management, protection, preservation or enjoyment of the visitor's visual experience of the Federal Class I area. This determination must be made on a case-by-case basis taking into account the geographic extent, intensity, duration, frequency and time of visibility impairment, and how these factors correlate with (1) times of visitor use of the Federal Class I area, and (2) the frequency and timing of natural conditions that reduce visibility.

[52.21(b)(29) added by 50 FR 28550, July 12, 1985]

(30) "Volatile organic compounds" excludes each of the following compounds, unless the compound is subject to an emissions standard under sections 111 or 112 of the Act: methane; ethane; methylene chloride; 1,1,1 trichloroethane (methyl chloroform); trichlorotrifluoroethane (CFC-113) (Freon 113); trichlorofluoromethane (CFC-11); dichlorodifluouromethane (CFC-12); chlorodifluoromethane (CFC-22); trifluoromethane (FC-23); dichlorotetrafluoroethane (CFC-114); and chloropentafluoroethane (CFC-115); dichlorotrifluoroethane (HCFC-123); tetrafluoroethane (HFC-134a); dichlorofluoroethane (HCFC-141b); and chlorodifluoroethane (HCFC-142b).

[52.21(b)(30) added by 54 FR 27299, June 28, 1989]

(c) *Ambient air increments.* In areas designated as Class I, II or III, increases in pollutant concentration over the baseline concentration shall be limited to the following:

Pollutant	Maximum allowable increase (micrograms per cubic meter)
CLASS I	
Particulate matter:	
TSP, annual geometric mean	5
TSP, 24-hr maximum	10
Sulfur dioxide:	
Annual arithmetic mean	2
24-hr maximum	5
3-hr maximum	25
Nitrogen dioxide:	
Annual arithmetic mean	2.5
CLASS II	
Particulate matter:	
TSP, annual geometric mean	19
TSP, 24-hr maximum	37
Sulfur dioxide:	
Annual arithmetic mean	20
24-hr maximum	91
3-hr maximum	512
Nitrogen dioxide:	
Annual arithmetic mean	25
CLASS III	
Particulate matter:	
TSP, annual geometric mean	37
TSP, 24-hr maximum	75
Sulfur dioxide:	
Annual arithmetic mean	40
24-hr maximum	182
3-hr maximum	700
Nitrogen dioxide:	
Annual arithmetic mean	50

[52.21(c) table amended by 52 FR 24712, July 1, 1987; 53 FR 40670, October 17, 1988]

For any period other than an annual period, the applicable maximum allowable increase may be exceeded during one such period per year at any one location.

(d) *Ambient air ceilings.* No concentration of a pollutant shall exceed:

(1) The concentration permitted under the national secondary ambient air quality standard, or

(2) The concentration permitted under the national primary ambient air quality standard, whichever concentration is lowest for the pollutant for a period of exposure.

(e) *Restrictions on area classifications.* (1) All of the following areas which were in existence on August 7, 1977, shall be Class I areas and may not be redesignated:

(i) International parks,

(ii) National wilderness areas which exceed 5,000 acres in size,

(iii) National memorial parks which exceed 5,000 acres in size, and

(iv) National parks which exceed 6,000 acres in size.

(2) Areas which were redesignated as Class I under regulations promulgated before August 7, 1977, shall remain Class I, but may be redesignated as provided in this section.

(3) Any other area, unless otherwise specified in the legislation creating such an area, is initially designated Class II, but may be redesignated as provided in this section.

(4) The following areas may be redesignated only as Class I or II:

(i) An area which as of August 7, 1977, exceeded 10,000 acres in size and was a national monument, a national primitive area, a national preserve, a national recreational area, a national wild and scenic river, a national wildlife refuge, a national lakeshore or seashore; and

(ii) A national park or national wilderness area established after August 7, 1977, which exceeds 10,000 acres in size.

(f) *Exclusions from increment consumption.* (1) Upon written request of the governor, made after notice and opportunity for at least one public hearing to be held in accordance with procedures established in 40 CFR 51.102, the Administrator shall exclude the following concentrations in determining compliance with a maximum allowable increase:

[52.21(f)(1) amended by 51 FR 40675, November 7, 1986]

(i) Concentrations attributable to the increase in emissions from stationary sources which have converted from the use of petroleum products, natural gas, or both by reason of an order in effect under sections 2(a) and (b) of the Energy Supply and Environmental Coordination Act of 1974 (or any superseding legislation) over the emissions from such sources before the effective date of such an order;

(ii) Concentrations attributable to the increase in emissions from sources which have converted from using natural gas by reason of a natural gas cur-

tailment plan in effect pursuant to the Federal Power Act over the emissions from such sources before the effective date of such plan;

(iii) Concentrations of particulate matter attributable to the increase in emissions from construction or other temporary emission-related activities of new or modified sources;

(iv) The increase in concentrations attributable to new sources outside the United States over the concentrations attributable to existing sources which are included in the baseline concentration; and

(v) Concentrations attributable to the temporary increase in emissions of sulfur dioxide, particulate matter, or nitrogen oxides from stationary sources which are affected by plan revisions approved by the Administrator as meeting the criteria specified in paragraph (f)(4) of this section.

[52.21(f)(1)(v) amended by 53 FR 40670, October 17, 1988]

(2) No exclusion of such concentrations shall apply more than five years after the effective date of the order to which paragraph (f)(1)(i) of this section, refers or the plan to which paragraph (f)(1)(ii) of this section, refers, whichever is applicable. If both such order and plan are applicable, no such exclusion shall apply more than five years after the later of such effective dates.

(3) No exclusion under paragraph (f) of this section shall occur later than 9 months after August 7, 1980, unless a State Implementation Plan revision meeting the requirements of 40 CFR 51.166 has been submitted to the Administrator.

[52.21(f)(3) amended by 51 FR 40675, November 7, 1986]

(4) For purposes of excluding concentrations pursuant to paragraph (f)(1)(v) of this section, the proposed plan revision shall:

(i) Specify the time over which the temporary emissions increase of sulfur dioxide, particulate matter, or nitrogen oxides would occur. Such time is not to exceed 2 years in duration unless a longer time is approved by the Administrator;

[52.21 (f)(4)(i) amended by 53 FR 40670, October 17, 1988]

(ii) Specify that the time period for excluding certain contributions in accordance with paragraph (f)(4)(i) of this section, is not renewable;

(iii) Allow no emissions increase from a stationary source which would:

(a) Impact a Class I area or an area where an applicable increment is known to be violated; or

(b) Cause or contribute to the violation of a national ambient air quality standard;

(iv) Require limitations to be in effect at the end of the time period specified in accordance with paragraph (f)(4)(i) of this section, which would ensure that the emissions levels from stationary sources affected by the plan revision would not exceed those levels occurring from such sources before the plan revision was approved.

(g) *Redesignation.* (1) All areas (except as otherwise provided under paragraph (e) of this section) are designated Class II as of December 5, 1974. Redesignation (except as otherwise precluded by paragraph (e) of this section) may be proposed by the respective States or Indian Governing Bodies, as provided below, subject to approval by the Administrator as a revision to the applicable State implementation plan.

(2) The State may submit to the Administrator a proposal to redesignate areas of the State Class I or Class II provided that:

(i) At least one public hearing has been held in accordance with procedures established in §51.102 of this chapter;

[52.21(g)(2)(i) amended by 51 FR 40675, November 7, 1986]

(ii) Other States, Indian Governing Bodies, and Federal Land Managers whose lands may be affected by the proposed redesignation were notified at least 30 days prior to the public hearing;

(iii) A discussion of the reasons for the proposed redesignation, including a satisfactory description and analysis of the health, environmental, economic, social and energy effects of the proposed redesignation, was prepared and made available for public inspection at least 30 days prior to the hearing and the notice announcing the hearing contained appropriate notification of the availability of such discussion;

(iv) Prior to the issuance of notice respecting the redesignation of an area that includes any Federal lands, the State has provided written notice to the appropriate Federal Land Manager and afforded adequate opportunity (not in excess of 60 days) to confer with the State respecting the redesignation and to submit written comments and recommendations. In redesignating any area with respect to which any Federal Land Manager had submitted written comments and recommendations, the State shall have published a list of any inconsistency between such redesignation and such comments and recommendations (together with the reasons for making such redesignation against the recommendation of the Federal Land Manager); and

(v) The State has proposed the redesignation after consultation with the elected leadership of local and other substate general purpose governments in the area covered by the proposed redesignation.

(3) Any area other than an area to which paragraph (e) of this section refers may be redesignated as Class III if—

(i) The redesignation would meet the requirements of paragraph (g)(2) of this section;

(ii) The redesignation, except any established by an Indian Governing Body, has been specifically approved by the Governor of the State, after consultation with the appropriate committees of the legislature, if it is in session, or with the leadership of the legislature, if it is not in session (unless State law provides that the redesignation must be specifically approved by State legislation) and if general purpose units of local government representing a majority of the residents of the area to be redesignated enact legislation or pass resolutions concurring in the redesignation;

(iii) The redesignation would not cause, or contribute to, a concentration of any air pollutant which would exceed any maximum allowable increase permitted under the classification of any other area or any national ambient air quality standard; and

(iv) Any permit application for any major stationary source or major modification, subject to review under paragraph (l) of this section, which

could receive a permit under this section only if the area in question were redesignated as Class III, and any material submitted as part of that application, were available insofar as was practicable for public inspection prior to any public hearing on redesignation of the area as Class III.

(4) Lands within the exterior boundaries of Indian Reservations may be redesignated only by the appropriate Indian Governing Body. The appropriate Indian Governing Body may submit to the Administrator a proposal to redesignate areas Class I, Class II, or Class III: *Provided*, That:

(i) The Indian Governing Body has followed procedures equivalent to those required of a State under paragraphs (g)(2), (g)(3)(ii), and (g)(3)(iv) of this section; and

(ii) Such redesignation is proposed after consultation with the State(s) in which the Indian Reservation is located and which border the Indian Reservation.

(5) The Administrator shall disapprove, within 90 days of submission, a proposed redesignation of any area only if he finds, after notice and opportunity for public hearing, that such redesignation does not meet the procedural requirements of this paragraph or is inconsistent with paragraph (e) of this section. If any such disapproval occurs, the classification of the area shall be that which was in effect prior to the redesignation which was disapproved.

(6) If the Administrator disapproves any proposed redesignation, the State or Indian Governing Body, as appropriate, may resubmit the proposal after correcting the deficiencies noted by the Administrator.

(h) *Stack heights.* (1) The degree of emission limitation required for control of any air pollutant under this section shall not be affected in any manner by—

(i) So much of the stack height of any source as exceeds good engineering practice, or

(ii) Any other dispersion technique.

(2) Paragraph (h)(1) of this section shall not apply with respect to stack heights in existence before December 31, 1970, or to dispersion techniques implemented before then.

[52.21(i) revised by 45 FR 52729, August 7, 1980]

(i) *Review of major stationary sources and major modifications—Source applicability and exemptions.* (1) No stationary source or modification to which the requirements of paragraphs (j) through (r) of this section apply shall begin actual construction without a permit which states that the stationary source or modification would meet those requirements. The Administrator has authority to issue any such permit.

(2) The requirements of paragraphs (j) through (r) of this section shall apply to any major stationary source and any major modification with respect to each pollutant subject to regulation under the Act that it would emit, except as this section otherwise provides.

(3) The requirements of paragraphs (j) through (r) of this section apply only to any major stationary source or major modification that would be constructed in an area designated as attainment or unclassifiable under section 107(d)(1)(D) or (E) of the Act.

(4) The requirements of paragraphs (j) through (r) of this section shall not apply to a particular major stationary source or major modification, if:

(i) Construction commenced on the source or modification before August 7, 1977. The regulations at 40 CFR 52.21 as in effect before August 7, 1977, shall govern the review and permitting of any such source or modification; or

(ii) The source or modification was subject to the review requirements of 40 CFR 52.21(d)(1) as in effect before March 1, 1978, and the owner or operator:

(a) Obtained under 40 CFR 52.21 a final approval effective before March 1, 1978;

(b) Commenced construction before March 19, 1979; and

(c) Did not discontinue construction for a period of 18 months or more and completed construction within a reasonable time; or

(iii) The source or modification was subject to 40 CFR 52.21 as in effect before March 1, 1978, and the review of an application for approval for the stationary source or modification under 40 CFR 52.21 would have been completed by March 1, 1978, but for an extension of the public comment period pursuant to a request for such an extension. In such a case, the application shall continue to be processed, and granted or denied, under 40 CFR 52.21 as in effect prior to March 1, 1978; or

(iv) The source or modification was not subject to 40 CFR 52.21 as in effect before March 1, 1978, and the owner or operator:

(a) Obtained all final Federal, state and local preconstruction approvals or permits necessary under the applicable State Implementation Plan before March 1, 1978;

(b) Commenced construction before March 19, 1979; and

(c) Did not discontinue construction for a period of 18 months or more and completed construction within a reasonable time; or

(v) The source or modification was not subject to 40 CFR 52.21 as in effect on June 19, 1978 or under the partial stay of regulations published on February 5, 1980 (45 FR 7800), and the owner or operator:

(a) Obtained all final Federal, state and local preconstruction approvals or permits necessary under the applicable State Implementation Plan before August 7, 1980;

(b) Commenced construction within 18 months from August 7, 1980, or any earlier time required under the applicable State Implementation Plan; and

(c) Did not discontinuue construction for a period of 18 months or more and completed construction within a reasonable time; or

(vi) The source or modification would be a nonprofit health or nonprofit educational institution, or a major modification would occur at such an institution, and the governor of the state in which the source or modification would be located requests that it be exempt from those requirements; or

(vii) The source or modification would be a major stationary source or major modification only if fugitive emissions, to the extent quantifiable, are considered in calculating the potential to emit of the stationary source or modification and the source does not belong to any of the following categories:

(a) Coal cleaning plants (with thermal dryers);

(b) Kraft pulp mills;

(c) Portland cement plants;

(d) Primary zinc smelters;

(e) Iron and steel mills;

(f) Primary aluminum ore reduction plants;

(g) Primary copper smelters;

(h) Municipal incinerators capable of charging more than 250 tons of refuse per day;

(i) Hydrofluoric, sulfuric, or nitric acid plants;
(j) Petroleum refineries;
(k) Lime plants;
(l) Phosphate rock processing plants;
(m) Coke oven batteries;
(n) Sulfur recovery plants;
(o) Carbon black plants (furnace process);
(p) Primary lead smelters;
(q) Fuel conversion plants;
(r) Sintering plants;
(s) Secondary metal production plants;
(t) Chemical process plants;
(u) Fossil-fuel boilers (or combination thereof) totaling more than 250 million British thermal units per hour heat input;
(v) Petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels;
(w) Taconite ore processing plants;
(x) Glass fiber processing plants;
(y) Charcoal production plants;
(z) Fossil fuel-fired steam electric plants of more than 250 million British thermal units per hour heat input;
(aa) Any other stationary source category which, as of August 7, 1980, is being regulated under section 111 or 112 of the Act; or

(viii) The source is a portable stationary source which has previously received a permit under this section, and

(a) The owner or operator proposes to relocate the source and emissions of the source at the new location would be temporary; and

(b) The emissions from the source would not exceed its allowable emissions; and

(c) The emissions from the source would impact no Class I area and no area where an applicable increment is known to be violated; and

(d) Reasonable notice is given to the Administrator prior to the relocation identifying the proposed new location and the probable duration of operation at the new location. Such notice shall be given to the Administrator not less than 10 days in advance of the proposed relocation unless a different time duration is previously approved by the Administrator.

[52.21(i)(4)(ix) and (x) added by 52 FR 24712, July 1, 1987]

(ix) The source or modification was not subject to §52.21, with respect to particulate matter, as in effect before July 31, 1987, and the owner or operator:

(a) Obtained all final Federal, State, and local preconstruction approvals or permits necessary under the applicable State implementation plan before July 31, 1987.

(b) Commenced construction within 18 months after July 31, 1987, or any earlier time required under the State implementation plan: and

(c) Did not discontinue construction for a period of 18 months or more and completed construction within a reasonable period of time;

(x) The source or modification was subject to 40 CFR 52.21, with respect to particulate matter, as in effect before July 31, 1987 and the owner or operator submitted an application for a permit under this section before that date, and the Administrator subsequently determines that the application as submitted was completed with respect to the particulate matter requirements then in effect in this section. Instead, the requirements of paragraphs (j) through (r) of this section that were in effect before July 31, 1987 shall apply to such source or modification.

(5) The requirements of paragraphs (j) through (r) of this section shall not apply to a major stationary source or major modification with respect to a particular pollutant if the owner or operator demonstrates that, as to that pollutant, the source or modification is located in an area designated as nonattainment under section 107 of the Act.

(6) The requirements of paragraphs (k), (m) and (o) of this section shall not apply to a major stationary source or major modification with respect to a particular pollutant, if the allowable emissions of that pollutant from the source, or the net emissions increase of that pollutant from the modification:

(i) Would impact no Class I area and no area where an applicable increment is known to be violated, and

(ii) Would be temporary.

(7) The requirements of paragraphs (k), (m) and (o) of this section as they relate to any maximum allowable increase for a Class II area shall not apply to a major modification at a stationary source that was in existence on March 1, 1978, if the net increase in allowable emissions of each pollutant subject to regulation under the Act from the modification after the application of best available control technology would be less than 50 tons per year.

(8) The Administrator may exempt a stationary source or modification from the requirements of paragraph (m) of this section, with respect to monitoring for a particular pollutant if:

(i) The emissions increase of the pollutant from the new source or the net emissions increase of the pollutant from the modification would cause, in any area, air quality impacts less than the following amounts:

[52.21(i)(8)(i) amended by 52 FR 24712, July 1, 1987]

Carbon monoxide—575 μg/m³, 8-hour average;
Nitrogen dioxide—14 μg/m³, annual average;
Particulate matter:
10 μg/m³ of TSP, 24-hour average.
10 μg/m³ of PM_{10}, 24-average;
Sulfur dioxide—13 μg/m³, 24-hour average;
Ozone: [1]
Lead — 0.1 μg/m³, 3-month average;
Mercury—0.25 μg/m³, 24-hour average;
Beryllium — 0.001 μg/m³, 24-hour average;
Fluorides — 0.25 μg/m³, 24-hour average;
Vinyl chloride—15 μg/m³, 24-hour average;
Total reduced sulfur—10 μg/m³, 1-hour average;
Hydrogen sulfide—0.2 μg/m³, 1-hour average;
Reduced sulfur compounds—10 μg/m³, 1-hour average, or

(ii) The concentrations of the pollutant in the area that the source or modification would affect are less than the concentrations listed in paragraph (i)(8)(i) of this section, or the

[1] No de minimis air quality level is provided for ozone. However, any net increase of 100 tons per year or more of volatile organic compounds subject to PSD would be required to perform an ambient impact analysis including the gathering of ambient air quality data.

pollutant is not listed in paragraph (i)(8)(i) of this section.

(9) The requirements for best available control technology in paragraph (j) of this section and the requirements for air quality analyses in paragraph (m)(1) of this section, shall not apply to a particular stationary source or modification that was subject to 40 CFR 52.21 as in effect on June 19, 1978, if the owner or operator of the source or modification submitted an application for a permit under those regulations before August 7, 1980, and the Administrator subsequently determines that the application as submitted before that date was complete. Instead, the requirements at 40 CFR 52.21(j) and (n) as in effect on June 19, 1978 apply to any such source or modification.

(10)(i) The requirements for air quality monitoring in paragraphs (m)(1) (ii) through (iv) of this section shall not apply to a particular source or modification that was subject to 40 CFR 52.21 as in effect on June 19, 1978, if the owner or operator of the source or modification submits an application for a permit under this section on or before June 8, 1981, and the Administrator subsequently determines that the application as submitted before that date was complete with respect to the requirements of this section other than those in paragraphs (m)(1) (ii) through (iv) of this section, and with respect to the requirements for such analyses at 40 CFR 52.21(m)(2) as in effect on June 19, 1978. Instead, the latter requirements shall apply to any such source or modification.

(ii) The requirements for air quality monitoring in paragraphs (m)(1) (ii) through (iv) of this section shall not apply to a particular source or modification that was not subject to 40 CFR 52.21 as in effect on June 19, 1978, if the owner or operator of the source or modification submits an application for a permit under this section on or before June 8, 1981, and the Administrator subsequently determines that the application as submitted before that date was complete, except with respect to the requirements in paragraphs (m)(1) (ii) through (iv).

[52.21(i)(11) added by 52 FR 24712, July 1, 1987]

(11)(i) At the discretion of the Administrator, the requirements for air quality monitoring of PM_{10} in paragraphs (m)(1)(i)-(iv) of this section may not apply to a particular source or modification when the owner or operator of the source or modification submits an application for a permit under this section on or before June 1, 1988 and the Administrator subsequently determines that the application as submitted before that date was complete, except with respect to the requirements for monitoring particulate matter in paragraphs (m)(1)(i)-(iv).

(ii) The requirements for air quality monitoring of PM_{10} in paragraphs (m)(1)(iii) and (iv) and (m)(3) of this section shall apply to a particular source or modification if the owner or operator of the source or modification submits an application for a permit under this section after June 1, 1988 and no later than December 1, 1988. The data shall have been gathered over at least the period from February 1, 1988 to the date the application becomes otherwise complete in accordance with the provisions set forth under paragraph (m)(1)(viii) of this section, except that if the Administrator determines that a complete and adequate analysis can be accomplished with monitoring data over a shorter period (not to be less than 4 months), the data that paragraph (m)(1)(iii) requires shall have been gathered over that shorter period.

(12) The requirements of paragraph (k)(2) of this section shall not apply to a stationary source or modification with respect to any maximum allowable increase for nitrogen oxides if the owner or operator of the source or modification submitted an application for a permit under this section before the provisions embodying the maximum allowable increase took effect as part of the applicable implementation plan and the Administrator subsequently determined that the application as submitted before that date was complete.

[52.21(i)(12) added by 53 FR 40670, October 17, 1988]

(j) *Control technology review.* (1) A major stationary source or major modification shall meet each applicable emissions limitation under the State Implementation Plan and each applicable emissions standard and standard of performance under 40 CFR Parts 60 and 61.

(2) A new major stationary source shall apply best available control technology for each pollutant subject to regulation under the Act that it would have the potential to emit in significant amounts.

(3) A major modification shall apply best available control technology for each pollutant subject to regulation under the Act for which it would result in a significant net emissions increase at the source. This requirement applies to each proposed emissions unit at which a net emissions increase in the pollutant would occur as a result of a physical change or change in the method of operation in the unit.

(4) For phased construction projects, the determination of best available control technology shall be reviewed and modified as appropriate at the latest reasonable time which occurs no later than 18 months prior to commencement of construction of each independent phase of the project. At such time, the owner or operator of the applicable stationary source may be required to demonstrate the adequacy of any previous determination of best available control technology for the source.

(k) *Source impact analysis.* The owner or operator of the proposed source or modification shall demonstrate that allowable emission increases from the proposed source or modification, in conjunction with all other applicable emissions increases or reductions (including secondary emissions), would not cause or contribute to air pollution in violation of:

(1) Any national ambient air quality standard in any air quality control region; or

(2) Any applicable maximum allowable increase over the baseline concentration in any area.

[52.21(l) revised by 51 FR 32178, September 9, 1986]

(l) *Air quality models.*

[52.21(l)(1) and (2) revised by 53 FR 396, January 6, 1988]

(1) All estimates of ambient concentrations required under this paragraph shall be based on the applicable air quality models, data bases, and other requirements specified in the "Guideline on Air Quality Models (Revised)" (1986) and Supplement A (1987) which are incorporated by reference. The guideline (EPA publication No. 450/2-78-027R) and Supplement A (1987) are for sale from the U.S. Department of Commerce, National Technical Information Service, 5825 Port Royal Road, Springfield, Virginia 22161. They are also available for inspection at

the Office of the Federal Register Information Center, Room 8301, 1100 L Street, N.W., Washington, DC 20408. This incorporation by reference was approved by the Director of the Federal Register on February 5, 1988. These materials are incorporated as they exist on the date of approval and a notice of any change will be published in the Federal Register.

(2) Where an air quality impact model specified in the "Guideline on Air Quality Models (Revised)" (1986) and Supplement A (1987) are inappropriate, the model may be modified or another model substituted. Such a modification or substitution of a model may be made on a case-by-case basis or, where appropriate, on a generic basis for a specific state program. Written approval of the Administrator must be obtained for any modification or substitution. In addition, use of a modified or substituted model must be subject to notice and opportunity for public comment under procedures developed in accordance with paragraph (q) of this section.

(m) *Air quality analysis*—(1) *Preapplication analysis.* (i) Any application for a permit under this section shall contain an analysis of ambient air quality in the area that the major stationary source or major modification would affect for each of the following pollutants:

(a) For the source, each pollutant that it would have the potential to omit in a significant amount;

(b) For the modification, each pollutant for which it would result in a significant net emissions increase.

(ii) With respect to any such pollutant for which no National Ambient Air Quality Standard exists, the analysis shall contain such air quality monitoring data as the Administrator determines is necessary to assess ambient air quality for that pollutant in any area that the emissions of that pollutant would affect.

(iii) With respect to any such pollutant (other than nonmethane hydrocarbons) for which such a standard does exist, the analysis shall contain continuous air quality monitoring data gathered for purposes of determining whether emissions of that pollutant would cause or contribute to a violation of the standard or any maximum allowable increase.

(iv) In general, the continuous air quality monitoring data that is required shall have been gathered over a period of at least one year and shall represent at least the year preceding receipt of the application, except that, if the Administrator determines that a complete and adequate analysis can be accomplished with monitoring data gathered over a period shorter than one year (but not to be less than four months), the data that is required shall have been gathered over at least that shorter period.

(v) For any application which becomes complete, except as to the requirements of paragraphs (m)(1)(iii) and (iv) of this section, between June 8, 1981, and February 9, 1982, the data that paragraph (m)(1)(iii) of this section, requires shall have been gathered over at least the period from February 9, 1981, to the date the application becomes otherwise complete, except that:

(a) If the source or modification would have been major for that pollutant under 40 CFR 52.21 as in effect on June 19, 1978, any monitoring data shall have been gathered over at least the period required by those regulations.

(b) If the Administrator determines that a complete and adequate analysis can be accomplished with monitoring data over a shorter period (not to be less than four months), the data that paragraph (m)(1)(iii) of this section, requires shall have been gathered over at least that shorter period.

(c) If the monitoring data would relate exclusively to ozone and would not have been required under 40 CFR 52.21 as in effect on June 19, 1978, the Administrator may waive the otherwise applicable requirements of this paragraph (v) to the extent that the applicant shows that the monitoring data would be unrepresentative of air quality over a full year.

(vi) The owner or operator of a proposed stationary source or modification of volatile organic compounds who satisfies all conditions of 40 CFR Part 51 Appendix S, section IV may provide post-approval monitoring data for ozone in lieu of providing preconstruction data as requried under paragraph (m)(1) of this section.

(vii) For any application that becomes complete, except as to the requirements of paragraph (m)(1)(iii) and (iv) pertaining to PM_{10}, after December 1, 1988 and no later than August 1, 1989 the data that paragraph (m)(1)(iii) requires shall have been gathered over at least the period from August 1, 1988 to the date the application becomes otherwise complete, except that if the Administrator determines that a complete and adequate analysis can be accomplished with monitoring data over a shorter period (not to be less than four months), the data that paragraph (m)(1)(iii) requires shall have been gathered over that shorter period.

[52.21(m)(1)(vii) added by 52 FR 24712, July 1, 1987; corrected by 52 FR 26401, July 14, 1987]

(viii) With respect to any requirements for air quality monitoring of PM_{10} under paragraphs (i)(11)(i) and (ii) of this section, the owner or operator of the source or modification shall use a monitoring method approved by the Administrator and shall estimate the ambient concentrations of PM_{10} using the data collected by such approved monitoring method in accordance with estimating procedures approved by the Administrator.

[52.21(m)(1)(viii) added by 52 FR 24712, July 1, 1987]

(2) Post-construction monitoring. The owner or operator of a major stationary source or major modification shall, after construction of the stationary source or modification, conduct such ambient monitoring as the Administrator determines is necessary to determine the effect emissions from the stationary source or modification may have, or are having, on air quality in any area.

(3) Operations of monitoring tions. The owner or operator major stationary source or m modification shall meet the requirements of Appendix B to Part 58 of this chapter during the operation of monitoring stations for purposes of satisfying paragraph (m) of this section.

(n) *Source information.* The owner or operator of a proposed source or modification shall submit all information necessary to perform any analysis or make any determination required under this section.

(1) With respect to a source or modification to which paragraphs (j), (l), (n) and (p) of this section apply, such information shall include:

(i) A description of the nature, location, design capacity, and typical operating schedule of the source or modification, including specifications and drawings showing its design and plant layout;

(ii) A detailed schedule for construction of the source or modification;

(iii) A detailed description as to what system of continuous emission reduction is planned for the source or modification, emission estimates, and any other information necessary to deter-

mine that best available control technology would be applied.

(2) Upon request of the Administrator, the owner or operator shall also provide information on:

(i) The air quality impact of the source or modification, including meteorological and topographical data necessary to estimate such impact; and

(ii) The air quality impacts, and the nature and extent of any or all general commercial, residential, industrial, and other growth which has occurred since August 7, 1977, in the area the source or modification would affect.

[52.21(p) redesignated as (o) by 45 FR 52729, August 7, 1980]

(o) *Additional impact analyses.* (1) The owner or operator shall provide an analysis of the impairment to visibility, soils and vegetation that would occur as a result of the source or modification and general commercial, residential, industrial and other growth associated with the source or modification. The owner or operator need not provide an analysis of the impact on vegetation having no significant commercial or recreational value.

(2) The owner or operator shall provide an analysis of the air quality impact projected for the area as a result of general commercial, residential, industrial and other growth associated with the source or modification.

(3) *Visibility monitoring.* The Administrator may require monitoring of visibility in any Federal class I area near the proposed new stationary source for major modification for such purposes and by such means as the Administrator deems necessary and appropriate.

[52.21(o)(3) added by 50 FR 28550, July 12, 1985]

[52.21(q) redesignated as (p) by 45 FR 52729, August 7, 1980]

(p) *Sources Impacting Federal Class I Areas — Additional Requirements* — (1) *Notice to Federal Land Managers.* The Administrator shall provide written notice of any permit application for a proposed major stationary source or major modification, the emissions from which may affect a Class I area, to the Federal land manager and the Federal official charged with direct responsibility for management of any lands within any such area. Such notification shall include a copy of all information relevant to the permit application and shall be given within 30 days of receipt and at least 60 days prior to any public hearing on the application for a permit to construct. Such notification shall include an analysis of the proposed source's anticipated impacts on visibility in the Federal Class I area. The Administrator shall also provide the Federal land manager and such Federal officials with a copy of the preliminary determination required under paragraph (q) of this section, and shall make available to them any materials used in making that determination, promptly after the Administrator makes such determination. Finally, the Administrator shall also notify all affected Federal land managers within 30 days of receipt of any advance notification of any such permit application.

[52.21(p)(1) revised by 50 FR 28550, July 12, 1985]

(2) *Federal Land Manager.* The Federal Land Manager and the Federal official charged with direct responsibility for management of such lands have an affirmative responsibility to protect the air quality related values (including visibility) of such lands and to consider, in consultation with the Administrator, whether a proposed source or modification will have an adverse impact on such values.

(3) *Visibility analysis.* The Administrator shall consider any analysis performed by the Federal land manager, provided within 30 days of the notification required by paragraph (p)(1) of this section, that shows that a proposed new major stationary source of major modification may have an adverse impact on visibility in any Federal Class I area. Where the Administrator finds that such an analysis does not demonstrate to the satisfaction of the Administrator that an adverse impact on visibility will result in the Federal Class I area, the Administrator must, in the notice of public hearing on the permit application, either explain his decision or give notice as to where the explanation can be obtained.

[New 52.21(p)(3) added and former (3) — (7) redesignated as (4) — (8) by 50 FR 28550, July 12, 1985]

(4) *Denial — impact on air quality related values.* The Federal Land Manager of any such lands may demonstrate to the Administrator that the emissions from a proposed source or modification would have an adverse impact on the air quality-related values (including visibility) of those lands, notwithstanding that the change in air quality resulting from emissions from such source or modification would not cause or contribute to concentrations which would exceed the maximum allowable increases for a Class I area. If the Administrator concurs with such demonstration, then he shall not issue the permit.

(5) *Class I variances.* The owner or operator of a proposed source or modification may demonstrate to the Federal Land Manager that the emissions from such source or modification would have no adverse impact on the air quality related values of any such lands (including visibility), notwithstanding that the change in air quality resulting from emissions from such source or modification would cause or contribute to concentrations which would exceed the maximum allowable increases for a Class I area. If the Federal land manager concurs with such demonstration and he so certifies, the State may authorize the Administrator, *Provided*, That the applicable requirements of this section are otherwise met, to issue the permit with such emission limitations as may be necessary to assure that emissions of sulfur dioxide, particulate matter, and nitrogen oxides would not exceed the following maximum allowable increases over minor source baseline concentration for such pollutants:

[52.21(p)(5) amended by 53 FR 40670, October 17, 1988]

Pollutant	Maximum allowable increase (micrograms per cubic meter)
Particulate matter:	
TSP, annual geometric mean	19
TSP, 24-hr maximum	37
Sulfur dioxide:	
Annual arithmetic mean	20
24-hr maximum	91
3-hr maximum	325
Nitrogen dioxide: Annual arithmetic mean	25

[52.21(p)(5) table amended by 52 FR 24712, July 1, 1987; 53 FR 40670, October 17, 1988]

(6) *Sulfur dioxide variance by Governor with Federal Land Manager's concurrence.* The owner or operator of a proposed source or modification which cannot be approved under paragraph (q)(4) of this section may demonstrate to the Governor that the source cannot be constructed by reason of any maximum allowable increase for sulfur dioxide for a period of twenty-four hours or less applicable to any Class I area and, in the case of Federal mandatory Class I areas, that

a variance under this clause would not adversely affect the air quality related values of the area (including visibility). The Governor, after consideration of the Federal Land Manager's recommendation (if any) and subject to his concurrence, may, after notice and public hearing, grant a variance from such maximum allowable increase. If such variance is granted, the Administrator shall issue a permit to such source or modification pursuant to the requirements of paragraph (q)(7) of this section: *Provided*, That the applicable requirements of this section are otherwise met.

(7) *Variance by the Governor with the President's concurrence.* In any case where the Governor recommends a variance in which the Federal Land Manager does not concur, the recommendations of the Governor and the Federal Land Manager shall be transmitted to the President. The President may approve the Governor's recommendation if he finds that the variance is in the national interest. If the variance is approved, the Administrator shall issue a permit pursuant to the requirements of paragraph (q)(7) of this section: *Provided*, That the applicable requirements of this section are otherwise met.

(8) *Emission limitations for Presidential or gubernatorial variance.* In the case of a permit issued pursuant to paragraph (q) (5) or (6) of this section the source or modification shall comply with such emission limitations as may be necessary to assure that emissions of sulfur dioxide from the source or modification would not (during any day on which the otherwise applicable maximum allowable increases are exceeded) cause or contribute to concentrations which would exceed the following maximum allowable increases over the baseline concentration and to assure that such emissions would not cause or contribute to concentrations which exceed the otherwise applicable maximum allowable increases for periods of exposure of 24 hours or less for more than 18 days, not necessarily consecutive, during any annual period:

MAXIMUM ALLOWABLE INCREASE

(Micrograms per cubic meter)

Period of exposure	Terrain areas	
	Low	High
24-hr maximum	36	62
3-hr maximum	130	221

(q) *Public participation.* The Administrator shall follow the applicable procedures of 40 CFR Part 124 in processing applications under this section. The Administrator shall follow the procedures at 40 CFR 52.21(r) as in effect on June 19, 1979, to the extent that the procedures of 40 CFR Part 124 do not apply.

(r) *Source obligation.* (1) Any owner or operator who constructs or operates a source or modification not in accordance with the application submitted pursuant to this section or with the terms of any approval to construct, or any owner or operator of a source or modification subject to this section who commences construction after the effective date of these regulations without applying for and receiving approval hereunder, shall be subject to appropriate enforcement action.

(2) Approval to construct shall become invalid if construction is not commenced within 18 months after receipt of such approval, if construction is discontinued for a period of 18 months or more, or if construction is not completed within a reasonable time. The Administrator may extend the 18-month period upon a satisfactory showing that an extension is justified. This provision does not apply to the time period between construction of the approved phases of a phased construction project; each phase must commence construction within 18 months of the projected and approved commencement date.

(3) Approval to construct shall not relieve any owner or operator of the responsibility to comply fully with applicable provisions of the State implementation plan and any other requirements under local, State, or Federal law.

(4) At such time that a particular source or modification becomes a major stationary source or major modification solely by virtue of a relaxation in any enforceable limitation which was established after August 7, 1980, on the capacity of the source or modification otherwise to emit a pollutant, such as a restriction on hours of operation, then the requirements or paragraphs (j) through (s) of this section shall apply to the source or modification as though construction had not yet commenced on the source or modification.

(s) *Environmental impact statements.* Whenever any proposed source or modification is subject to action by a Federal Agency which might necessitate preparation of an environmental impact statement pursuant to the National Environmental Policy Act (42 U.S.C. 4321), review by the Administrator conducted pursuant to this section shall be coordinated with the broad environmental reviews under that Act and under section 309 of the Clean Air Act to the maximum extent feasible and reasonable.

(t) *Disputed permits or redesignations.* If any State affected by the redesignation of an area by an Indian Governing Body, or any Indian Governing Body of a tribe affected by the redesignation of an area by a State, disagrees with such redesignation, or if a permit is proposed to be issued for any major stationary source or major modification proposed for construction in any State which the Governor of an affected State or Indian Governing Body of an affected tribe determines will cause or contribute to a cumulative change in air quality in excess of that allowed in this part within the affected State or Indian Reservation, the Governor or Indian Governing Body may request the Administrator to enter into negotiations with the parties involved to resolve such dispute. If requested by any State or Indian Governing Body involved, the Administrator shall make a recommendation to resolve the dispute and protect the air quality related values of the lands involved. If the parties involved do not reach agreement, the Administrator shall resolve the dispute and his determination, or the results of agreements reached through other means, shall become part of the applicable State implementation plan and shall be enforceable as part of such plan. In resolving such disputes relating to area redesignation, the Administrator shall consider the extent to which the lands involved are of sufficient size to allow effective air quality management or have air quality related values of such an area.

(u) *Delegation of authority.* (1) The Administrator shall have the authority to delegate his responsibility for conducting source review pursuant to this section, in accordance with paragraphs (v) (2) and (3) of this section.

(2) Where the Administrator delegates the responsibility for conducting source review under this section to any agency other than a Regional Office of the Environmental Protection Agency, the following provisions shall apply:

(i) Where the delegate agency is not

[Sec. 52.21(u)(2)(i)]

an air pollution control agency, it shall consult with the appropriate State and local air pollution control agency prior to making any determination under this section. Similarly, where the delegate agency does not have continuing responsibility for managing land use, it shall consult with the appropriate State and local agency primarily responsible for managing land use prior to making any determination under this section.

(ii) The delegate agency shall send a copy of any public comment notice required under paragraph (r) of this section to the Administrator through the appropriate Regional Office.

(3) The Administrator's authority for reviewing a source or modification located on an Indian Reservation shall not be redelegated other than to a Regional Office of the Environmental Protection Agency, except where the State has assumed jurisdiction over such land under other laws. Where the State has assumed such jurisdiction, the Administrator may delegate his authority to the States in accordance with paragraph (v)(2) of this section.

(4) In the case of a source or modification which proposes to construct in a class III area, emissions from which would cause or contribute to air quality exceeding the maximum allowable increase applicable if the area were designated a class II area, and where no standard under section 111 of the act has been promulgated for such source category, the Administrator must approve the determination of best available control technology as set forth in the permit.

(v) *Innovative control technology.* (1) An owner or operator of a proposed major stationary source or major modification may request the Administrator in writing no later than the close of the comment period under 40 CFR 124.10 to approve a system of innovative control technology.

(2) The Administrator shall, with the consent of the governor(s) of the affected state(s), determine that the source or modification may employ a system of innovative control technology, if:

(i) The proposed control system would not cause or contribute to an unreasonable risk to public health, welfare, or safety in its operation or function;

(ii) The owner or operator agrees to achieve a level of continuous emissions reduction equivalent to that which would have been required under paragraph (j)(2) of this section, by a date specified by the Administrator. Such date shall not be later than 4 years from the time of startup or 7 years from permit issuance;

(iii) The source or modification would meet the requirements of paragraphs (j) and (k) of this section, based on the emissions rate that the stationary source employing the system of innovative control technology would be required to meet on the date specified by the Administrator;

(iv) The source or modification would not before the date specified by the Administrator:

(*a*) Cause or contribute to a violation of an applicable national ambient air quality standard; or

[52.21(v)(2)(iv)(*b*) removed and (*c*) redesignated as new (*b*) by 54 FR 27299, June 28, 1989]

(*b*) Impact any area where an applicable increment is known to be violated; and

(v) All other applicable requirements including those for public participation have been met.

(vi) The provisions of paragraph (p) of this section (relating to Class I areas) have been satisfied with respect to all periods during the life of the source or modification.

[52.21(v)(2)(vi) added by 54 FR 27299, June 28, 1989]

(3) The Administrator shall withdraw any approval to employ a system of innovative control technology made under this section, if:

(i) The proposed system fails by the specified date to achieve the required continuous emissions reduction rate; or

(ii) The proposed system fails before the specified date so as to contribute to an unreasonable risk to public health, welfare, or safety; or

(iii) The Administrator decides at any time that the proposed system is unlikely to achieve the required level of control or to protect the public health, welfare, or safety.

(4) If a source or modification fails to meet the required level of continuous emission reduction within the specified time period or the approval is withdrawn in accordance with paragraph (v)(3) of this section, the Administrator may allow the source or modification up to an additional 3 years to meet the requirement for the application of best available control technology through use of a demonstrated system of control.

(w) *Permit rescission.* (1) Any permit issued under this section or a prior version of this section shall remain in effect, unless and until it expires under paragraph (s) of this section or is rescinded.

(2) Any owner or operator of a stationary source or modification who holds a permit for the source or modification which was issued under 40 CFR 52.21 as in effect on July 30, 1987, or any earlier version of this section, may request that the Administrator rescind the permit or a particular portion of the permit.

[52.21(w)(2) amended by 52 FR 24712, July 1, 1987]

(3) The Administrator shall grant an application for rescission if the application shows that this section would not apply to the source or modification.

(4) If the Administrator rescinds a permit under this paragraph, the public shall be given adequate notice of the rescission. Publication of an announcement of rescission in a newspaper of general circulation in the affected region within 60 days of the rescission shall be considered adequate notice.

§ 52.22 Maintenance of national standards.

(a) Subsequent to January 31, 1973, the Administrator reviewed again State implementation plan provisions for insuring the maintenance of the national standards. The review indicates that State plans generally do not contain regulations or procedures which adequately address this problem. Accordingly, all State plans are disapproved with respect to maintenance because such plans do not meet the requirements of § 51.12(g) of this chapter. The disapproval applies to all States listed in Subparts B through DDD of this part. Nothing in this section shall invalidate or otherwise affect the obligations of States, emission sources, or other persons with respect to all portions of plans approved or promulgated under this part.

(b) *Regulation for review of new or modified indirect sources.* (1) All terms used in this paragraph but not specifically defined below shall have the meaning given them in § 52.01 of this chapter.

(i) The term "indirect source" means a facility, building, structure, or installation which attracts or may attract mobile source activity that results in emissions of a pollutant for which there is a national standard. Such indirect sources include, but are not limited to:

(*a*) Highways and roads.

(*b*) Parking facilities.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

DEC 1 1987

OFFICE OF
AIR AND RADIATION

MEMORANDUM

SUBJECT: Improving New Source Review (NSR) Implementation

FROM: J. Craig Potter
Assistant Administrator for Air and Radiation (ANR-443)

TO: Regional Administrator,
Regions I-X

On June 27, 1986, I established a special task force to address growing concerns about the consistency and certainty of permits issued under the Clean Air Act's prevention of significant deterioration and nonattainment area NSR programs. Based on the findings and recommendations of the task force, I am today establishing certain program initiatives designed to improve the timeliness, certainty, and effectiveness of these programs.

A great deal of effort will be required to overcome the problems which have developed, but it is my belief that these problems, with your full cooperation and assistance, can be resolved so that these essential air management programs can fulfill their intended roles. Therefore, I urge each of you to provide the maximum priority and resource commitments available to the task.

The outstanding concern we now face in these programs is inadequate implementation. The Office of Air and Radiation intends to apply its resource commitments so as to enhance its ability to provide technical support and guidance, training, workshops, auditing, and enforcement support to the Regions and delegated programs. The Regional Offices must make a corresponding resource commitment for these efforts to succeed. Accordingly, I am requesting that you initiate a self-evaluation of current NSR activities and, to the extent necessary, refocus Regional attention on these programs in an effort to improve and enhance NSR program implementation.

To ensure that we maintain the flexibility to make this effort a dynamic one, capable of sensing and adjusting to the needs of the program, I intend to establish an informal group of our colleagues to report to me on progress in implementing the initiatives discussed below. The mission of the group is to provide the feedback necessary to maximize the effectiveness of NSR implementation and to make NSR reflective of air program needs.

The following is a list of the specific program initiatives I am hereby instituting to bring about improvements in NSR implementation:

Tracking Permit Actions--Initially and until such time as permit quality can be assured, I am requiring that each Regional Office establish (if not already in place) a program to ensure a timely and comprehensive review of all State and local agency-issued major source permits and certain minor source permits. Implementation of the program will be made part of the Regional Office Management System and will require the "real time" exchange and review of information between the Regional Office and the State and local agencies when a key milestone is reached during the permitting process.

Effective communication between the permitting agency and the Regional Office is essential to improving program implementation. Therefore, the Regional Offices will need to ensure that State and local permitting agencies follow certain notification procedures such as:

- Notify the Regional Office and other affected parties (e.g., the Federal land manager if Class I areas are impacted), within a reasonable time, of the receipt of a new major source permit application. This can take the form of a complete copy of the application itself or a brief description of the proposed project. Notification can be made as each application is received or the information may be submitted to the Regional Office in a periodic report.

- Submit to the Regional Office a complete public notification package at the beginning of the public notice period. The package must contain the public notice language, the proposed permit, and a technical analysis demonstrating how the proposed project complies with the technical review requirements of the regulations [e.g., best available control technology (BACT) or lowest achievable emission rate (LAER), air quality impacts or offsets].

- Submit to the Regional Office a copy of the final preconstruction permit when issued, including a response to any appropriate comments submitted during the public comment period.

- Submit to the Regional Office a copy of the operating permit when issued.

Likewise, when informed of a permit action, the Regional Office is responsible for the timely review of the information, specifically:

- Screen incoming information on permit applications for potential issues or concerns and, if warranted, communicate them to the permitting agency.

- Perform a timely and comprehensive review of the public notice package and, if warranted, provide comment during the public comment period. To aid in this task, I have directed the Office of Air Quality Planning and Standards (OAQPS) to start

work on the development of a permit review checklist for use by the Regional Office during the public comment period. The checklist will also be useful to State and local agencies as a tool for self-audit and to understand what the Environmental Protection Agency (EPA) emphasizes when reviewing a proposed permit.

- Review any response to comments and the final permit to ensure that any outstanding concerns have been resolved satisfactorily.

- Review the permit to operate to ensure that it is consistent with the preconstruction permit.

- Take prompt and appropriate action to deter the issuance or use of permits which fail to meet minimal Federal requirements. I have directed OAQPS to work with the Office of General Counsel and the Office of Enforcement and Compliance Monitoring to develop guidance for the Regional Offices on the appropriate legal mechanisms and procedures for handling deficient permit actions.

- To the extent practicable, prior to permit issuance, review potential minor permit actions which exempt an otherwise major source or modification from a major review (e.g., "synthetic" minor sources, major sources netting out of review, and 99.9 or 249.9 tons per year sources).

The most critical element of these initiatives is the Regional Office review of proposed permit actions during the public comment period. The FY 1985 national air audit showed widespread serious permit deficiencies, many of which could have been corrected without interfering with State and local agency processing if dealt with by EPA during the public comment period. By uniformly reviewing all major source permit actions during the comment period, EPA is able to address deficient reviews or permits before the final permit is issued. This not only permits more consistency in the permitting process among the States, but also provides the highest degree of certainty to the applicant that the permit will not be challenged by EPA at a later date. Moreover, if the permit is not reviewed and commented on prior to issuance, the possibility of successfully challenging the action is greatly diminished, as is the opportunity to improve the enforceability of the permit.

BACT Determinations--Of all the NSR processes, BACT (and LAER) determinations are perhaps the most misunderstood and the least correctly applied. The BACT alternative, if presented by the applicant at all, are often poorly documented or biased to achieve the decision the applicant desires.

To bring consistency to the BACT process, I have authorized OAQPS to proceed with developing specific guidance on the use of the "top-down" approach to BACT. The first step in this approach is to determine, for the emission source in question, the most stringent control available for a similar or identical source or source category. If it can be shown that this level of control is technically or economically infeasible for the source

in question, then the next most stringent level of control is determined and similarly evaluated. This process continues until the BACT level under consideration cannot be eliminated by any substantial or unique technical, environmental, or economic objections. Thus, the "top-down" approach shifts the burden of proof to the applicant to justify why the proposed source is unable to apply the best technology available. It also differs from other processes in that it requires the applicant to analyze a control technology only if the applicant opposes that level of control; the other processes required a full analysis of all possible types and levels of control above the baseline case.

The "top-down" approach is essentially already required for municipal waste combustors pursuant to the June 22, 1987, Administrator's remand to Region IX of the H-Power BACT decision and the OAQPS June 26, 1987, "Operational Guidance on Control Technology for New and Modified Municipal Waste Combustors (MWC's)." It is also currently being successfully implemented by many permitting agencies and some of the Regional Offices for all sources. I have therefore determined that it should be adopted across the board.

In the interim, while OAQPS develops specific guidance on the "top- down" process, I am requesting the Regional Office to apply it to their BACT determinations and to strongly encourage State and local agencies to do likewise. Moreover, when a State agency proposes as BACT a level of control that appears to be inconsistent with the "top-down" concept, such as failure to adequately consider the more stringent control options, the Regional Office is to provide comment to that agency. A final BACT determination which still fails to reflect adequate consideration of the factors that would have been relevant using a "top-down" type of analysis shall be considered deficient by EPA.

Training--No formal training workshops specific to NSR have been held since 1980. Many State and local agencies, as well as the Regional Offices, have experienced a high rate of NSR personnel turnover since then. Many of the basic problems that are occurring in NSR implementation can be traced to the lack of comprehensive, continuing training for new Regional Office and State agency personnel.

To rectify this situation, in FY 1988, OAQPS will work on developing materials for a comprehensive training program in the form of Regional workshops to be conducted in FY 1989.

Commencing in FY 1989, biannual Headquarters-sponsored NSR workshops will be conducted at each Regional Office with State and local agencies attendance encouraged. Workshop topics will cover the NSR rules and policy, BACT and LAER determinations, effective permit writing, how to review a proposed permit and audit a permit file, and other program areas as needed. Appropriately trained Regional staff are to then hold these workshops at their respective State agencies. The NSR experts from Headquarters or NSR experts from other Regions will be available to assist.

In addition, Regional Offices should reserve the funds necessary to send at least one EPA staff representative to the NSR workshops (for EPA only) held semiannually at Denver, Colorado (February), and Southern Pines, North Carolina (July). Attendance at these workshops plays a vital role in keeping the Regions up to date on program implementation and new and emerging policy.

Policy and Guidance--Continuous litigation and regulatory changes have combined with the complexity of NSR rules to create a log jam of the policy and guidance needed to help interpret and effectively apply these rules. Therefore, I am directing that in FY 1989 OAQPS dedicate at least one staff person to ensuring a timely response to policy and guidance requests. In the interim, I intend to continue OAQPS's efforts to compile and organize NSR reference and guidance materials, such as the NSR electronic bulletin board.

I realize that the initiatives discussed above constitute only the first steps of a continuing process to address concerns and needs relating to NSR program implementation. In recognition of the possible need to maintain flexibility in managing and improving the NSR process I will, as indicated earlier, establish a group to monitor our progress under this new policy. The group will be comprised of representatives from EPA Headquarters and Regional Offices and we will consult with State and local agency officials as part of our effort to obtain timely feedback as we implement these initiatives.

Additional specific guidance on improvements in the program areas discussed above will be issued in the near future. In the meantime, each Regional Office is directed to work closely with its State and local agencies to ensure that all aspects of the NSR permit programs comply with all applicable State and Federal program requirements.

Your comments and suggestions are welcome. Please direct them to Gary McCutchen, Chief, New Source Review Section, MD-15, Research Triangle Park, North Carolina 27711 (FTS 629-5592).

cc: Air Division Directors, Regions I-X

November 3, 1980 PSD Applicability Request, Valero Transmission Company Yoakum, DeWitt County, Texas 3.25

THE TEXT YOU ARE VIEWING IS A COMPUTER-GENERATED OR RETYPED VERSION OF A PAPER PHOTOCOPY OF THE ORIGINAL. ALTHOUGH CONSIDERABLE EFFORT HAS BEEN EXPENDED TO QUALITY ASSURE THE CONVERSION, IT MAY CONTAIN TYPOGRAPHICAL ERRORS. TO OBTAIN A LEGAL COPY OF THE ORIGINAL DOCUMENT, AS IT CURRENTLY EXISTS, THE READER SHOULD CONTACT THE OFFICE THAT ORIGINATED THE CORRESPONDENCE OR PROVIDED THE RESPONSE.

3.25

Nov 03, 1986

Mr. Allen Eli Bell
Executive Director
Texas Air Control Board
6330 Highway 290 East
Austin, Texas 78723

Re: PSD Applicability Request, Valero Transmission Company
Yoakum, DeWitt County, Texas

Dear Mr. Bell:

We have reviewed Valero Transmission Company's request for an applicability determination of Prevention of Significant Deterioration (PSD) permit requirements to the expansion at their Gohlke Plant in DeWitt County, Texas. At issue is whether the relationship between Valero Transmission Company, as a service provider under the SIC major code 49, to Valero Gathering Company under SIC major code 13 is such that there are two distinct PSD sources here.

Valero asserts that its gathering company is a separate company from its transmission company. Valero Gathering Company processes the gas from wells to remove hydrogen sulfide, carbon dioxide, and water to meet pipeline specifications prior to custody transfer to Valero Transmission Company. The principal product of Valero Gathering Company is pipeline quality natural gas under the SIC major code 13, while the principal product of Valero

Transmission Company is the distribution of natural gas through a pipeline system under the SIC major code 49. Valero maintains that the Gathering Company does not convey, store, or otherwise assist in the production of Valero Transmission's principal product, and therefore concludes that the two companies are separate sources for the purpose of PSD applicability. For similar reasons, Valero maintains that Valero Hydrocarbon Company, an extraction facility in close proximity to Valero Transmission Company with an SIC major code 13, is a separate source from Valero Transmission Company.

In reviewing the PSD requirements, it is evident that each source is to be classified according to its primary activity which is determined by its principal product or group of products. Thus, one source classification encompasses both primary and support facilities, even if it includes units with different two digit SIC codes. Support facilities are typically those which convey, store, or otherwise assist in the production of the principal product or group of products produced or distributed, or services rendered. See 45 FR 52695 (August 7, 1980).

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At issue is whether Valero Transmission Company is a support facility to Valero Gathering Company. A review of the activities of the two companies indicates that both companies produce natural gas as their principal product. We consider Valero Transmission Company as a support facility to Valero Gathering Company since the Transmission Company receives the processed natural gas from Valero Gathering Company and compresses it for distribution into a pipeline system. Thus, Valero Transmission Company is a support facility to Valero Gathering in that it conveys the product natural gas from the processing plant into the pipeline system. Available information further indicates that conveyance of the product natural gas through the Transmission Company is the only means of introducing the product natural gas into commerce. The Gathering Company is not equipped to introduce its product into commerce by any means other than through the Transmission Company. Consequently, for the purposes of determining whether modifications to Valero Transmission Company would be subject to PSD, Valero Transmission Company and Valero Gathering Company are considered to be one source.

On September 26, 1986, Mr. Ken Waid of Waid and Associates asked for clarification on how the distance between two facilities

would affect the applicability of the PSD regulations' one source classification to such facilities. In the case of Valero Gathering Company and Valero Transmission Company, the distance between them does not affect the applicability of the PSD regulations' one source classification to such facilities since they are on contiguous properties. The gathering and transmission plants are one source for the reasons stated above. For cases where sources are not located on contiguous or adjacent properties, EPA cannot say precisely how far apart the activities must be in order to be treated separately. EPA can only answer that question through case-by-case determinations See 45 FR 52695 (August 7, 1980).

If you have any questions, please call Mr. Stanley M. Spruiell of my staff at (214) 767-9875.

Sincerely yours,

(s) JACK S. DIVITA
for
William B. Hathaway
Director
Air, Pesticides and Toxics Division (6T)

cc: Mr. Lawrence Pewitt, P.E., Director
Permits Division
Texas Air Control Board

bcc: Ascenzi (6T-EN)
Diggs (6T-AN)
Rasnic (EN-341)

OhioEPA Inter-Office Communication

TO: Ed Mead, Chief, Air Engineering Services, NWDO DATE: June 26, 1978

FROM: Bob Hodanbosi, Chief, Environmental Assessment Section, OAPC

SUBJECT: Emission Offsets

In response to your question of June 20, 1978, the entity must obtain offsets for the entire amount of emissions i.e. >150 tons per year.

Also the 100 tons per year cutoff is considered to be cumulative emissions for a specific pollutant since December 21, 1976. That is if a facility has installed four 20 TPY hydrocarbon sources since December 21, 1976 and now wants to install a hydrocarbon source of 25 TPY emission offsets must be obtained. The amount of the offset should be greater than 105 tons per year.

BH:gvr

cc: New Source Review Contacts

INTER-OFFICE COMMUNICATION

TO Robert Hodanbosi, OAPC DATE 6-20-78 JUN 22 1978

FROM: Ed Mead, NWDO Em

SUBJECT: Offsets

When an entity wishes to install a new source of air contaminants in a non-attainment area that exceed 100 TPY, must he obtain offsets for just that which exceeds the 100 TPY or for the whole amount; i.e. if a 150 TPY source is proposed, must the entity obtain 50 TPY of offset or 150 TPY of offset?

EM/sd

OhioEPA Inter-Office Communication

TO: New Source Review Contacts DATE: June 28, 1978

FROM: Bob Bonanbosi, Chief, Environmental Assessment Section, OAPC

SUBJECT: PSD Regulation

June 19, 1978 Federal Register

Attached are a copy of the Prevention of Significant Deterioration Regulations recently issued by U.S. EPA. The state does not have delegation for this program, and new sources affected by these regulations should contact Region V to obtain a PSD permit.

Also attached for your information is a copy of a question from NWDO concerning offsets and my response.

If you have any questions feel free to call me

BH:gwr

Attachments

See Jan 16, 1979 (Emission Offsets Ruling)

Forget

MONDAY, JUNE 19, 1978
PART V

ENVIRONMENTAL PROTECTION AGENCY

1977 CLEAN AIR ACT; PREVENTION OF SIGNIFICANT AIR QUALITY DETERIORATION

State Implementation Plans; Requirements

[6560-01]

Title 40—Protection of Environment

CHAPTER I—ENVIRONMENTAL PROTECTION AGENCY

Subchapter C—Air Programs

[FRL 904-3]

PART 51—REQUIREMENTS FOR PREPARATION, ADOPTION, AND SUBMITTAL OF IMPLEMENTATION PLANS

Prevention of Significant Air Quality Deterioration

AGENCY: Environmental Protection Agency.

ACTION: Final rule.

SUMMARY: The Clean Air Act Amendments of 1977 (Pub. L. 95-95) include comprehensive new requirements for the prevention of significant air quality deterioration (PSD). EPA is today publishing final guidance to assist States in preparing State implementation plan (SIP) revisions meeting the new requirements. Each State is to submit such a revision to EPA for approval within nine months of today.

DATES: State implementation plan revisions due within nine months after this publication date (March 19, 1979).

FOR FURTHER INFORMATION CONTACT:

Darryl Tyler, Chief, Standards Implementation Branch (MD-15), Office of Air Quality Planning and Standards, Research Triangle Part, N.C 27711, 919-541-5425.

SUPPLEMENTARY INFORMATION:

Pre-1977 Amendments

On December 5, 1974, EPA published regulations under the 1970 version of the Clean Air Act (Pub. L. 91-604) for the prevention of significant air quality deterioration (PSD). These regulations, codified at 40 CFR 52.21, established a program for protecting areas with air quality cleaner than the national ambient air quality standards (NAAQS).

Under EPA's regulatory program, clean areas of the Nation could be designated under any of three "Classes." Specified numerical "increments" of air pollution were permitted under each class up to a level considered to be "significant" for that area. Class I increments permitted only minor air quality deterioration; class II increments, moderate deterioration; class III increments, deterioration up to the secondary NAAQS.

EPA initially designated all clean areas of the Nation as class II. States, Indian Governing Bodies, and officials having control over Federal lands (Federal land managers) were given authority to redesignate their lands under specified procedures. The area classification system was administered and enforced through a preconstruction permit program for nineteen specified types of stationary air pollution sources. This preconstruction review in addition to limiting future air quality deterioration required that any source subject to the requirements would apply best available control technology (BACT).

1977 Amendments

On August 7, 1977, the Clean Air Act Amendments of 1977 became law. The 1977 amendments changed the 1970 act and EPA's regulations in many respects, particularly with regard to PSD. (See Clean Air Act sections 160-169, 42 U.S.C. 7470-79 (Clean Air Act Amendments of 1977, Pub. L. 95-95, 127(a), 91 Stat. 731), as amended, Pub. L. 95-190, section 14(a) (40)-(54), 91 Stat. 1401-02 (November 16, 1977) (technical and conforming amendments).) In addition to mandating certain immediately effective changes to EPA's PSD regulations, the new Clean Air Act, in sections 160-169, contains comprehensive new PSD requirements. These new requirements are to be incorporated by States into their implementation plans (under section 110 of the act). By virtue of section 406(d) of the amendments, such State implementation plan revisions are due nine months after EPA issues these regulations published today which provide the States with guidance on submitting approvable plan provisions. In the interim, implementation of the PSD program under 40 CFR 52.21 will continue but as amended today.

In a rulemaking action appearing elsewhere in today's FEDERAL REGISTER, EPA amends its own PSD regulations (40 CFR 52.21) to incorporate all of the new requirements of sections 160-169. The two rulemaking actions promulgated today are essentially identical, with the difference in reviewing agency, EPA as opposed to a State, being the major distinction. The issues discussed below as supplementary information to this rulemaking focus on concerns inherent to State PSD implementation. Other topics of concern to States choosing to develop their own PSD programs are discussed in the rulemaking affecting EPA's current implementation of the PSD program (40 CFR 52.21). Thus, the two rules should be read together.

Protection of Increments

New section 163(b) of the act sets forth immediately effective ambient air increments for particulate matter and sulfur dioxide in class I, class II, and class III areas. EPA specifically solicited public comments as to whether the PSD "increments" were to be protected only through the preconstruction review process of section 165 of the act. Section 161 of the act requires that each implementation plan "contain emission limits and such other measures as may be necessary * * * to prevent significant deterioration * * *." Section 163 requires plans to "contain measures assuring protection of ambient increments and ceilings."

State agencies and major industries that addressed the question uniformly felt that preconstruction review alone was the mechanism considered by Congress to protect increment consumption. Environmental groups felt that the increments should be treated in basically the same regulatory manner as the ambient air quality standards established under Section 109. A careful review of the legislative history indicates that the latter approach is the approach intended by Congress. The legislative history is particularly clear in the conference report on the bill that was finally adopted by Congress and signed into law. (H.R. Rep. No. 95-564, at 149 (1977).) The conference report describes the approach taken in the House bill regarding increment protection: "If increments are exceeded, the State must revise the State implementation plan to insure that the increment is not exceeded. Sources receiving new emission limitations would be eligible for compliance date extensions under the compliance date extension section of the bill." (Id.) This approach differs considerably from the approach in the Senate bill which was specifically limited to the review of major sources. Since Congress had a clear choice to make and as the language in the final act is that of the House bill, States are required to secure appropriate emissions reductions where the increment has been exceeded.

Any SIP relaxations submitted after today that would affect a PSD area must include a demonstration that the applicable increment will not be exceeded. Increment consumption due to a plan relaxation would be typically determined through modeling the difference between the allowable emissions resulting from the new relaxed SIP limit and the emissions of the applicable sources which would be included in the baseline. SIP relaxations received by EPA after August 7, 1977, but before today's FEDERAL REGISTER will consume increment. However, EPA believes that such revisions require special consideration due to the uncertainty of how the new Act would apply to such SIP relaxations. EPA review these proposed revisions as to the degree of anticipated increment consumption without advance notice would have caused considerable delay and economic disruption. Therefore,

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the Administrator feels that these SIP relaxations need not be individually assessed to determine the precise amount of consumed increment before such relaxations may be approved. The periodic assessment requirement to verify that the applicable increments have not been exceeded is thought to be sufficient protection.

The State must include a program to assess periodically whether emissions from exempted or unreviewed sources are endangering an applicable increment. Such periodic reviews must be subject to the opportunity for public hearing. If a periodic review or the ambient impact review of a major source shows an area to be in violation of an increment, then the plan must be revised within 60 days or such time as determined by the Administrator. The SIP revision should be designed to roll back emissions to a level such that the increment is no longer exceeded. This may induce the use of economic incentives such as emissions charges or the development of offset markets. SIP revisions are more thoroughly discussed in the supplementary information to EPA's PSD regulation published elsewhere in today's FEDERAL REGISTER.

The comments raised a number of other issues related to consumption of increments. The Administrator wishes to clarify first that States can expand the available PSD increment(s) by requiring emission reductions from existing sources. Similarly, the procurement of acceptable emission offsets (i.e., additional control of existing sources) may be used by a source, if a State so permits, in order to allow its construction where the increment would not otherwise allow approval. For further discussion of increment consumption, see the preamble to EPA's PSD regulations published elsewhere in today's FEDERAL REGISTER.

State implementation plan revisions to implement the new PSD requirements are required to specify the measures both to protect the increments and allocate their use. States under today's 40 CFR part 51 regulations are encouraged to examine alternative approaches to the allocation of available increments in order to provide for their individual growth objectives and planning concerns. To support this effort, the Agency is initiating studies to assess the merits and feasibility of various allocation programs. The Agency will evaluate approaches in which economic incentives serve as a supplement to, or a replacement for, an administrative permitting procedure and variations on first-come, first-served permitting. The economic incentive based approaches to be considered include marketable permits, emissions fees, and emissions zoning.

A marketable permit program would allow, among other things, a permitted source to sell portions of its permit to other sources. An ordinary permit specifies certain conditions on the maximum emissions from the source but provides no incentive to reduce emissions below the level specified in the permit. A marketable permit allows the source to sell a portion of its permit proportional to the degree to which it reduces emissions below the level specified in the original permit through the application of improved control technology. Thus, a source would have an incentive to reduce emissions since it could sell the emission reduction to another source. A source would purchase this offsetting reduction if it were cheaper than its own cost of reduction. Thus, a marketable permit program could lead to the same emission reduction as a standard permit program but at a lower total cost. Sources with higher marginal costs of compliance would control less and sources with lower marginal costs would control more.

Under another approach, emission fees would be charged to a source according to the quantity of pollutants it emits. These would serve as an incentive to minimize pollution since reducing pollution will lower costs to the source. Emissions fees might be used as a supplement to or replacement for ordinary permits.

Emission density zoning classifies each land area according to the quantity of pollutants that could be emitted into the air over that land. This might be based on some allowable ambient pollutant concentration. Thus, each acre of land translates to a fixed quantity of emissions allowed. Sources would then purchase the "air rights" to enough land to cover their emissions. If these rights are expensive, sources will control more than if these air rights were cheap. In general, these air rights will be more expensive in areas where there is high demand from many sources than in areas where there are fewer sources of comparable size. More expensive air rights would lead to higher levels of control, since more costly equipment would be justified in order to buy the remaining air rights.

EPA in the past has implemented the PSD program on a first-come, first-served basis. However, it does not appear that this approach alone may be adequate to achieve the purposes of the act on a long-term basis. While EPA is administering the PSD permit program, the Administrator will solicit and give careful consideration during the permit review process to the views of State and local officials regarding the impact of proposed permit decisions on an area's potential for economic development. For further discussion, see the preamble to EPA's PSD regulations published elsewhere in today's FEDERAL REGISTER.

PERMIT REVIEW PROCESS

Virtually every comment spoke to the issue of subjecting sources to PSD review on the basis of their uncontrolled emissions as EPA proposed. Many State and local agencies expressed a deep concern that to make sources subject to the full PSD requirements on this basis would result in an unmanageable number of detailed and resource intensive reviews. The rulemaking allows States generally to exempt from air quality reviews those sources with minimal emissions. Only those sources which would have allowable emissions equal to or greater than 50 tons per year, 1,000 pounds per day, or 100 pounds per hour (50/1,000/100), or would impact a class I area or an area where the increment is known to be violated, must receive an ambient review. In addition only these sources must undergo case-by-case review for BACT and then only as to those pollutants regulated under the act for which the source would be major.

The rulemaking also allows States to exempt sources with allowable emissions of less than 50 tons per year from a case-by-case BACT review where the State feels such an exemption is appropriate. It should be noted that this approach is based on analysis which indicates that, on a national basis, such sources are a very small part of emissions growth. In some States such sources may be a more significant portion of the emissions inventory and thus BACT review of smaller sources may be appropriate. States should examine this issue carefully in preparing their implementation plan. EPA will also consider this issue in evaluating plan revisions submitted by States.

State implementation plans must include procedures for expeditiously informing a PSD permit applicant of the completeness of the application. The permitting authority must specify a time period within which the completeness of a permit application would be determined. For example, EPA specifies 30 days when implementing the PSD program under 40 CFR 52.21.

BACT

The November 3, 1977, proposal solicited comment on the use of a de minimis level of 100 tons per year potential emissions for each pollutant for triggering the BACT requirement. The Agency stated the issue:

> For example, if a source is subject to PSD review either because it is one of the named sources or because it has potential emissions of 250 tons per year of a given pollutant, BACT would be required only for those pollutants whose potential emissions exceed 100 tons per year.

Comments received indicated that if a source is subject to PSD on the basis

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of the 250 tons per year criterion, then the BACT de minimis level should be made consistent for such sources (i.e., BACT should be required only for those pollutants for which the potential emissions exceed 250 tons). The Administrator agrees with this argument and appropriate changes are made in the regulations set forth below.

MONITORING AND MODELING

Extensive public comment was received on the proposed requirements for monitoring and modeling. These issues are extensively discussed in the Part 52 rulemaking published elsewhere in today's FEDERAL REGISTER. As noted, EPA intends that monitoring should generally focus on obtaining data necessary for required review against NAAQS. Although the increment consumption must of necessity be tracked through the use of modeling, EPA does not intend that there be no "real world" checks on the accuracy of modeling. If a source or other party believes that the recommended models have either overpredicted or underpredicted the air quality impact of a source, the State may accept the submission of data which will more precisely define the impact of the source.

may be permitted only if an area is redesignated has been limited to sources for which an ambient impact analysis must be done. Finally, this rulemaking removes the provision requiring that final action on a permit be delayed if the source would impact upon an area where a proposed redesignation to a more stringent class was pending. The original intent of this provision was to protect potential class I areas during startup of the new PSD program. All areas were then class II. Now Congress has specifically designated Federal class I areas and States have had considerable opportunity to designate any others. States may establish such a requirement at their own discretion.

Several other issues are discussed in the "Supplementary Information" to the part 52 PSD rulemaking also published today. That discussion should be considered in conjunction with this one.

FINAL ACTION

The following regulatory amendments are nationally applicable, and this action is based upon determina-

coal cleaning plants (with therm dryers), kraft pulp mills, portla cement plants, primary zinc iron and steel mill plants, pri minum ore reduction plants, prima copper smelters, municipal incine ators capable of charging more th 250 tons of refuse per day, hydr fluoric, sulfuric, and nitric acid plan petroleum refineries, lime plan phosphate rock processing plants, co oven batteries, sulfur recovery plan carbon black plants (furnace proces primary lead smelters, fuel conversi plants, sintering plants, seconda metal production plants, chemic process plants, fossil fuel boilers (combination thereof) totaling mo than 250 million British thermal uni per hour heat input, petroleum sto age and transfer units with a tot storage capacity exceeding 300,0 barrels, taconite ore processing plant glass fiber processing plants, and cha coal production plants; and

(ii) Notwithstanding the source size specified in paragraph (b)(1)(i) of th section, any source which emits, or ha the potential to emit, 250 tons pe year or more of any air pollutant regu lated under the Act.

(2) "Major modification" means an physical change in, change in th method of operation of, or addition t a stationary source which increase the potential emission rate of any ai pollutant regulated under the Act (in cluding any not previously and taking into account all acc ed increases in potential emissions oc curring at the source since regulation were approved under this section, o since the time of the last constructio approval issued for the source pursu ant to such regulations approve under this section, whichever time i more recent, regardless of any emis sion reductions achieved elsewhere in the source) by either 100 tons per year or more for any source category identified in paragraph (b)(1)(i) of this section, or by 250 tons per year or more for any stationary source.

(i) A physical change shall not include routine maintenance, repair and replacement.

(ii) A change in the method of operation, unless previously limited by enforceable permit conditions, shall not include:

(a) An increase in the production rate, if such increase does not exceed the operating design capacity of the source;

(b) An increase in the hours of operation;

(c) Use of an alternative fuel or raw material by reason of an order in effect under sections 2(a) and (b) of the Energy Supply and Environmental Coordination Act of 1974 (or superseding legislation), or by re a natural gas curtailment pla effect pursuant to the Federal Power Act;

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of the 250 tons per year criterion, then the BACT de minimis level should be made consistent for such sources (i.e., BACT should be required only for those pollutants for which the potential emissions exceed 250 tons). The Administrator agrees with this argument and appropriate changes are made in the regulations set forth below.

MONITORING AND MODELING

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Several other issues are discussed in the "Supplementary Information" to the part 52 PSD rulemaking also published today. That discussion should be considered in conjunction with this one.

FINAL ACTION

The following regulatory amendments are nationally applicable, and this action is based upon determina-

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(d) Use of an alternative fuel or raw material, if prior to January 6, 1975, the source was capable of accommodating such fuel or material; or

(e) Use of an alternative fuel by reason of an order or rule under section 125 of the Act.

(f) Change in ownership of the source.

(3) "Potential to emit" means the capability at maximum capacity to emit a pollutant in the absence of air pollution control equipment. "Air pollution control equipment" includes control equipment which is not, aside from air pollution control laws and regulations, vital to production of the normal product of the source or to its normal operation. Annual potential shall be based on the maximum annual rated capacity of the source, unless the source is subject to enforceable permit conditions which limit the annual hours of operation. Enforceable permit conditions on the type or amount of materials combusted or processed may be used in determining the potential emission rate of a source.

(4) "Source" means any structure, building, facility, equipment, installation or operation (or combination thereof) which is located on one or more contiguous or adjacent properties and which is owned or operated by the same person (or by persons under common control).

(5) "Facility" means an identifiable piece of process equipment. A stationary source is composed of one or more pollutant-emitting facilities.

(6) "Fugitive dust" means particulate matter composed of soil which is uncontaminated by pollutants resulting from industrial activity. Fugitive dust may include emissions from haul roads, wind erosion of exposed soil surfaces and soil storage piles, and other activities in which soil is either removed, stored, transported, or redistributed.

(7) "Construction" means fabrication, erection, installation, or modification of a source.

(8) "Commence" as applied to construction of a major stationary source or major modification means that the owner or operator has all necessary preconstruction approvals and either has:

(i) Begun, or caused to begin, a continuous program of physical on-site construction of the source to be completed within a reasonable time; or

(ii) Entered into binding agreements or contractual obligations, which cannot be cancelled or modified without substantial loss to the owner or operator, to undertake a program of construction of the source to be completed within a reasonable time.

(9) "Necessary preconstruction approvals or permits" means those permits or approvals required under Federal air quality control laws and regulations and those air quality control laws and regulations which are part of the applicable State implementation plan.

(10) "Best available control technology" means an emission limitation (including a visible emission standard) based on the maximum degree of reduction for each pollutant subject to regulation under the act which would be emitted from any proposed major stationary source or major modification which the permitting authority, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such source or modification through application of production processes or available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of such pollutant. In no event shall application of the best available control technology result in emissions of any pollutant which would exceed the emissions allowed by any applicable standard under 40 CFR Part 60 and Part 61. If the reviewing agency determines that technological or economic limitations on the application of measurement methodology to a particular class of sources would make the imposition of an emission standard infeasible, it may instead prescribe a design, equipment, work practice or operational standard, or combination thereof, to require the application of best available control technology. Such standard shall, to the degree possible, set forth the emission reduction achievable by implementation of such design, equipment, work practice or operation and shall provide for compliance by means which achieve equivalent results.

(11) "Baseline concentration" means that ambient concentration level reflecting actual air quality as of August 7, 1977, minus any contribution from major stationary sources and major modifications on which construction commenced on or after January 6, 1975. The baseline concentration shall include contributions from:

(i) The actual emissions of other sources in existence on August 7, 1977, except that contributions from facilities within such existing sources for which a plan revision proposing less restrictive requirements was submitted on or before August 7, 1977, and was pending action by the Administrator on that date shall be determined from the allowable emissions of such facilities under the plan as revised; and

(ii) The allowable emissions of major stationary sources and major modifications which commenced construction before January 6, 1975, but were not in operation by August 7, 1977.

(12) "Federal Land Manager" means, with respect to any lands in the United States, the Secretary of the department with authority over such lands.

(13) "High terrain" means any area having an elevation of 900 feet or more above the base of the stack of a facility.

(14) "Low terrain" means any area other than high terrain.

(15) "Indian Reservation" means any federally-recognized reservation established by treaty, agreement, Executive order, or act of Congress.

(16) "Indian Governing Body" means the governing body of any tribe, band, or group of Indians subject to the jurisdiction of the United States and recognized by the United States as possessing power of self-government.

(17) "Allowable emissions" means the emission rate calculated using the maximum rated capacity of the source (unless the source is subject to enforceable permit conditions which limit the operating rate or hours of operation, or both) and the most stringent of the following:

(i) Applicable standards as set forth in 40 CFR Part 60 and Part 61.

(ii) The applicable State implementation plan emission limitation, or

(iii) The emission rate specified as a permit condition.

(18) "Reconstruction" will be presumed to have taken place where the fixed capital cost of the new components exceed 50 percent of the fixed capital cost of a comparable entirely new facility or source. However, any final decision as to whether reconstruction has occurred shall be made in accordance with the provisions of 40 CFR 60.15(f)(1)-(3). A reconstructed source will be treated as a new source for purposes of this section, except that use of an alternative fuel or raw material by reason of an order in effect under Sections 2 (a) and (b) of the Energy Supply and Environmental Coordination Act of 1974 (or any superseding legislation), by reason of a natural gas curtailment plan in effect pursuant to the Federal Power Act, or by reason of an order or rule under Section 125 of the Act, shall not be considered reconstruction. In determining best available control technology for a reconstructed source, the provisions of 40 CFR 60.15(f)(4) shall be taken into account in assessing whether a standard of performance under 40 CFR Part 60 is applicable to such source.

(19) "Fixed capital cost" means the capital needed to provide all the depreciable components.

(c) *Ambient air increments.* The plan shall contain emission limitations and such other measures as may be necessary to assure that in areas designated as Class I, II, or III, increases in pollutant concentration over the baseline concentration shall be limited to the following:

Pollutant	Maximum allowable increase (micrograms per cubic meter)
Class I	
Particulate matter:	
Annual geometric mean	5
24-hr maximum	10
Sulfur dioxide:	
Annual arithmetic mean	2
24-hr maximum	5
3-hr maximum	25
Class II	
Particulate matter:	
Annual geometric mean	19
24-hr maximum	37
Sulfur dioxide:	
Annual arithmetic mean	20
24-hr maximum	91
3-hr maximum	512
Class III	
Particulate matter:	
Annual geometric mean	37
24-hr maximum	75
Sulfur dioxide:	
Annual arithmetic mean	40
24-hr maximum	182
3-hr maximum	700

For any period other than an annual period, the applicable maximum allowable increase may be exceeded during one such period per year at any one location.

(d) *Ambient air ceilings.* The plan shall provide that no concentration of a pollutant shall exceed:

(1) The concentration permitted under the national secondary ambient air quality standard, or

(2) The concentration permitted under the national primary ambient air quality standard, whichever concentration is lowest for the pollutant for a period of exposure.

(e) *Restrictions on area classifications.* The plan shall provide that—

(1) All of the following areas which were in existence on August 7, 1977, shall be Class I areas and may not be redesignated:

(i) International parks,

(ii) National wilderness areas which exceed 5,000 acres in size,

(iii) National memorial parks which exceed 5,000 acres in size, and

(iv) National parks which exceed 6,000 acres in size.

(2) Areas which were redesignated as Class I under regulations promulgated before August 7, 1977, shall remain Class I, but may be redesignated as provided in this section.

(3) Any other area, unless otherwise specified in the legislation creating such an area, is initially designated Class II, but may be redesignated as provided in this section.

(4) The following areas may be redesignated only as Class I or II:

(i) An area which as of August 7, 1977, exceeded 10,000 acres in size and was a national monument, a national primitive area, a national preserve, a national recreational area, a national wild and scenic river, a national wildlife refuge, a national lakeshore or seashore; and

(ii) A national park or national wilderness area established after August 7, 1977, which exceeds 10,000 acres in size.

(f) *Exclusions from increment consumption.* (1) The plan may provide that the following concentrations shall be excluded in determining compliance with a maximum allowable increase:

(i) Concentrations attributable to the increase in emissions from stationary sources which have converted from the use of petroleum products, natural gas, or both by reason of an order in effect under Sections 2 (a) and (b) of the Energy Supply and Environmental Coordination Act of 1974 (or any superseding legislation) over the emissions from such sources before the effective date of such an order;

(ii) Concentrations attributable to the increase in emissions from sources which have converted from using natural gas by reason of a natural gas curtailment plan in effect pursuant to the Federal Power Act over the emissions from such sources before the effective date of such plan;

(iii) Concentrations of particulate matter attributable to the increase in emissions from construction or other temporary emission-related activities; and

(iv) The increase in concentrations attributable to new sources outside the United States over the concentrations attributable to existing sources which are included in the baseline concentration.

(2) If the plan provides that the concentrations to which paragraph (f)(1) refers shall be excluded, it shall also provide that—

(i) No exclusion of such concentrations shall apply more than five years after the effective date of the order to which paragraph (f)(1)(i) refers or the plan to which paragraph (f)(1)(ii) refers, whichever is applicable.

(ii) If both such order and plan are applicable, no such exclusion shall apply more than five years after the later of such effective dates.

(g) *Redesignation.* (1) The plan shall provide that all areas of the State (except as otherwise provided under paragraph (e) of this section) shall be designated either Class I, Class II, or Class III. Any designation other than Class II shall be subject to the redesignation procedures of this paragraph. Redesignation (except as otherwise precluded by paragraph (e) of this section) may be proposed by the respective States or Indian Governing Bodies, as provided below, subject to approval by the Administrator as a revision to the applicable State implementation plan.

(2) The plan may provide that the State may submit to the Administrator a proposal to redesignate areas of the State Class I or Class II: *Provided*, That:

(i) At least one public hearing has been held in accordance with procedures established in § 51.4.

(ii) Other States, Indian Governing Bodies, and Federal Land Managers whose lands may be affected by the proposed redesignation were notified at least 30 days prior to the public hearing.

(iii) A discussion of the reasons for the proposed redesignation, including a satisfactory description and analysis of the health, environmental, economic, social, and energy effects of the proposed redesignation, was prepared and made available for public inspection at least 30 days prior to the hearing and the notice announcing the hearing contained appropriate notification of the availability of such discussion.

(iv) Prior to the issuance of notice respecting the redesignation of an area that includes any Federal lands, the State has provided written notice to the appropriate Federal Land Manager and afforded adequate opportunity (not in excess of 60 days) to confer with the State respecting the redesignation and to submit written comments and recommendations. In redesignating any area with respect to which any Federal Land Manager had submitted written comments and recommendations, the State shall have published a list of any inconsistency between such redesignation and such comments and recommendations (together with the reasons for making such redesignation against the recommendation of the Federal Land Manager); and

(v) The State has proposed the redesignation after consultation with the elected leadership of local and other substate general purpose governments in the area covered by the proposed redesignation.

(3) The plan may provide that any area other than an area to which paragraph (e) of this section refers may be redesignated as Class III if—

(i) The redesignation would meet the requirements of provisions established in accordance with paragraph (g)(2) of this section;

(ii) The redesignation, except any established by an Indian Governing Body, has been specifically approved by the Governor of the State, after consultation with the appropriate committees of the legislature, if it is in session, or with the leadership of the legislature, if it is not in session (unless State law provides that such redesignation must be specifically approved by State legislation) and if general purpose units of local government representing a majority of the residents of the area to be redesignated enact legislation (including resolutions where appropriate) concurring in the redesignation;

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(iii) The redesignation would not cause, or contribute to, a concentration of any air pollutant which would exceed any maximum allowable increase permitted under the classification of any other area or any national ambient air quality standard; and

(iv) Any permit application for any major stationary source or major modification subject to provisions established in accordance with paragraph (l) of this section which could receive a permit only if the area in question were redesignated as Class III, and any material submitted as part of that application, were available, insofar as was practicable, for public inspection prior to any public hearing on redesignation of any area as Class III.

(4) The plan shall provide that lands within the exterior boundaries of Indian Reservations may be redesignated only by the appropriate Indian Governing Body. The appropriate Indian Governing Body may submit to the Administrator a proposal to redesignate areas Class I, Class II, or Class III: *Provided*, That:

(i) The Indian Governing Body has followed procedures equivalent to those required of a State under paragraphs (g)(2), (g)(3)(iii), and (g)(3)(iv) of this section; and

(ii) Such redesignation is proposed after consultation with the State(s) in which the Indian Reservation is located and which border the Indian Reservation.

(5) The Administrator shall disapprove, within 90 days of submission, a proposed redesignation of any area only if he finds, after notice and opportunity for public hearing, that such redesignation does not meet the procedural requirements of this section or is inconsistent with paragraph (e) of this section. If any such disapproval occurs, the classification of the area shall be that which was in effect prior to the redesignation which was disapproved.

(6) If the Administrator disapproves any proposed area designation, the State or Indian Governing Body, as appropriate, may resubmit the proposal after correcting the deficiencies noted by the Administrator.

(h) *Stack heights.* The plan shall provide, as a minimum, that the degree of emission limitation required for control of any air pollutant under the plan shall not be affected in any manner by—

(1) So much of a stack height, in existence before December 31, 1970, as exceeds good engineering practice, or

(2) Any other dispersion technique implemented before then.

(i) *Review of major stationary sources and major modifications—Source applicability and general exemptions.* (1) The plan shall provide that no major stationary source or major modification shall be constructed unless, as a minimum, requirements equivalent to those contained in the subparagraphs of paragraphs (j), (l), (n), (p), and (r) of this section, have been met. The plan may provide that such requirements shall apply to a proposed source or modification only with respect to those pollutants for which the proposed construction would be a major stationary source or major modification.

(2) The plan may provide, as a minimum, that requirements equivalent to those contained in the subparagraphs of paragraphs (j), (l), (n), and (p) of this section shall not apply to a major stationary source or major modification with respect to a particular pollutant if the owner or operator demonstrates that—

(i) As to that pollutant, the source or modification is subject to the emission offset ruling (41 FR 55524) as it may be amended or to regulations approved or promulgated pursuant to Section 173 of the Act, and

(ii) The source or modification would impact no area attaining the national ambient air quality standards (either internal or external to areas designated as nonattainment under Section 107 of the Act).

(3) The plan may provide that requirements equivalent to those contained in the subparagraphs of paragraphs (j), (l), (n), (p), and (r) shall not apply to nonprofit health or education institutions.

(4) The plan may provide that a portable facility which has received construction approval under requirements equivalent to those contained in the subparagraphs of paragraphs (j), (l), (n), (p), (q), and (r) may relocate without being subject to such requirements if—

(i) Emissions from the facility would not exceed allowable emissions; and

(ii) Such relocation would impact no Class I area and no area where an applicable increment is known to be violated; and

(iii) Notice is given to the reviewing authority at least 30 days prior to such relocation identifying the proposed new location and the probable duration of operation at such location.

(j) *Control technology review.* The plan shall provide that—

(1) A major stationary source or major modification shall meet all applicable emission limitations under the State implementation plan and all applicable emission standards and standards of performance under 40 CFR Part 60 and Part 61.

(2) A major stationary source or major modification shall apply best available control technology for each applicable pollutant, unless the increase in allowable emissions of that pollutant from the source would be less than 50 tons per year, 1,000 pounds per day, or 100 pounds per hour, whichever is most restrictive.

(i) The preceding hourly or daily rates shall apply only with respect to a pollutant for which an increment, or national ambient air quality standards, for a period less than 24 hours or a period of 24 hours, as appropriate, has been established.

(ii) In determining whether and to what extent a modification would increase allowable emissions, there shall be taken into account no emission reductions achieved elsewhere at the source at which the modification would occur.

(3) In the case of a modification, the requirement for best available control technology shall apply only to each new or modified facility which would increase the allowable emissions of an applicable pollutant.

(4) Where a facility within a source would be modified but not reconstructed, the requirement for best available control technology, notwithstanding paragraph (j)(2) of this section, shall not apply if no net increase in emissions of an applicable pollutant would occur at the source, taking into account all emission increases and decreases at the source which would accompany the modification, and no adverse air quality impact would occur.

(5) For phased construction projects the determination of best available control technology shall be reviewed, and modified as appropriate, at the latest reasonable time prior to commencement of construction of each independent phase of the proposed source or modification.

(6) In the case of a major stationary source or major modification which the owner or operator proposes to construct in a Class III area, emissions from which would cause or contribute to air quality exceeding the maximum allowable increase that would be applicable if the area were a Class II area and where no standard under 40 CFR Part 60 has been promulgated for the source category, the Administrator shall approve the determination of best available control technology.

(k) *Exemptions from impact analysis.* (1) The plan may provide that with respect to a particular pollutant the requirements of provisions established in accordance with paragraphs (l), (n), and (p) of this section shall not apply to a proposed major stationary source or major modification, if—

(i) The increase in allowable emissions of that pollutant from the source or modification would impact no Class I area and no area where an applicable increment is known to be violated; and

(ii) The increase in allowable emissions of that pollutant from the source or modification would be less than 50 tons per year, 1,000 pounds per day, or 100 pounds per hour, whichever is most restrictive; or

(iii) The emissions of the pollutant are of a temporary nature including but not limited to those from a pilot plant, a portable facility, construction, or exploration; or

(iv) A source is modified, but no increase in the net amount of emissions for any pollutant subject to a national ambient air quality standard and no adverse air quality impact would occur.

(2) The hourly or daily rates set in paragraph (k)(1)(ii) of this section shall apply only with respect to a pollutant for which an increment, or national ambient air quality standard, for a period of less than 24 hours or for a period of 24 hours, as appropriate, has been established.

(3) The plan shall provide that, in determining for the purpose of provisions established in accordance with paragraph (k)(1)(ii) of this section whether and to what extent a modification would increase allowable emissions, there shall be taken into account no emission reductions achieved elsewhere at the source at which the modification would occur.

(4) The plan shall provide that, in determining for the purpose of provisions established in accordance with paragraph (k)(1)(iv) of this section whether and to what extent there would be an increase in the net amount of emissions of any pollutant subject to a national ambient air quality standard from the source which is modified, there shall be taken into account all emission increases and decreases occurring at the source since August 7, 1977.

(5) The plan may provide that the requirements of provisions established in accordance with paragraphs (l), (n), and (p) of this section shall not apply to a major stationary source or major modification with respect to emissions from it which the owner or operator has shown to be fugitive dust.

(l) *Air quality review.* (1) The plan shall provide that the owner or operator of the proposed source or modification must demonstrate that allowable emissions increases from the source or modification, in conjunction with all other applicable emissions increases or reductions, will not cause or contribute to air pollution in violation of—

(i) Any national ambient air quality standard in any air quality control region; or

(ii) Any applicable maximum allowable increase over the baseline concentration in any area.

(m) *Air quality models.* (1) The plan shall provide for procedures which specify that—

(i) All estimates of ambient concentrations required under paragraph (l) shall be based on the applicable air quality models, data bases, and other requirements specified in the *Guidelines on Air Quality Models* (OAQPS 1.2-080, U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards, Research Triangle Park, N.C. 27711, April 1978).

(ii) Where an air quality impact model specified in the *Guideline on Air Quality Models* is inappropriate, the model may be modified or another model substituted.

(iii) A substitution or modification of a model shall be subject to public comment procedures developed in accordance with paragraph (r) of this section.

(iv) Written approval of the Administrator must be obtained for any modification or substitution.

(v) Methods like those outlined in the *Workbook for the Comparison of Air Quality Models* (U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards, Research Triangle Park, N.C. 27711, April 1977) should be used to determine the comparability of air quality models.

(2) The *Guideline on Air Quality Models* is incorporated by reference. On April 27, 1978, the Office of the Federal Register approved this document for incorporation by reference. A copy of the guideline is on file in the Federal Register library.

(3) The documents referenced in this paragraph are available for public inspection at EPA's Public Information Reference Unit, Room 2922, 401 M Street SW., Washington, D.C. 20460, and at the libraries of each of the ten EPA Regional Offices. Copies are available as supplies permit from the Library Service Office (MD-35), U.S. Environmental Protection Agency, Research Triangle Park, N.C. 27711. Also, copies may be purchased from the National Technical Information Service, 5285 Port Royal Road, Springfield, Va. 22161.

(n) *Monitoring.* The plan shall provide that—

(1) The owner or operator of a proposed source or modification shall, after construction of the source or modification, conduct such ambient air quality monitoring as the reviewing authority determines may be necessary to establish the effect which emissions from the source or modification of a pollutant for which a national ambient air quality standard exists (other than non-methane hydrocarbons) may have, or is having, on air quality in any area which such emissions would affect.

(2) As necessary to determine whether emissions from the proposed source or modification would cause or contribute to a violation of a national ambient air quality standard, any permit application submitted after August 7, 1978, shall include an analysis of continuous air quality monitoring data for any pollutant emitted by the source or modification for which a national ambient air quality standard exists, except non-methane hydrocarbons. Such data shall relate to, and shall have been gathered over, the year preceding receipt of the complete application, unless the owner or operato demonstrates to the Administrator satisfaction that such data gathered over a portion or portions of that year or another representative year would be adequate to determine that the source or modification would not cause or contribute to a violation of a national ambient air quality standard.

(o) *Source information.* (1) The plan shall provide that the owner or operator of a proposed source or modification shall submit all information necessary to perform any analysis or make any determination required under procedures established in accordance with this section.

(2) The plan may provide that such information shall include:

(i) A description of the nature, location, design capacity, and typical operating schedule of the source or modification, including specifications and drawings showing its design and plant layout;

(ii) A detailed schedule for construction of the source or modification;

(iii) A detailed description as to what system of continuous emission reduction is planned by the source or modification, emission estimates, and any other information as necessary to determine that best available control technology as applicable would be applied;

(3) The plan shall provide that up request of the State, the owner or operator shall also provide information on:

(i) The air quality impact of the source or modification, including meteorological and topographical data necessary to estimate such impact; and

(ii) The air quality impacts and the nature and extent of any or all general commercial, residential, industrial, and other growth which has occurred since August 7, 1977, in the area the source or modification would affect.

(p) *Additional impact analyses.* The plan shall provide that—

(1) The owner or operator shall provide an analysis of the impairment to visibility, soils, and vegetation that would occur as a result of the source or modification and general commercial, residential, industrial, and other growth associated with the source or modification. The owner or operator need not provide an analysis of the impact on vegetation having no significant commercial or recreational value.

(2) The owner or operator shall provide an analysis of the air quality impact projected for the area as a result of general commercial, residential, industrial, and other growth associated with the source or modification.

(q) *Sources impacting Federal Class I areas—additional requirements—*

(1) *Notice to EPA.* The plan shall provide that the reviewing authority shall transmit to the Administrator a copy of each permit application relating to a major stationary source or major modification and provide notice to the Administrator of every action related to the consideration of such permit.

(2) *Federal Land Manager.* The Federal Land Manager and the Federal official charged with direct responsibility for management of Class I lands have an affirmative responsibility to protect the air quality related values (including visibility) of any such lands and to consider, in consultation with the Administrator, whether a proposed source or modification would have an adverse impact on such values.

(3) *Denial—impact on air quality related values.* The plan shall provide a mechanism whereby a Federal Land Manager of any such lands may present to the State, after the reviewing authority's preliminary determination required under procedures developed in accordance with paragraph (r) of this section, a demonstration that the emissions from the proposed source or modification would have an adverse impact on the air quality-related values (including visibility) of any Federal mandatory Class I lands, notwithstanding that the change in air quality resulting from emissions from such source or modification would not cause or contribute to concentrations which would exceed the maximum allowable increases for a Class I area. If the State concurs with such demonstration, the reviewing authority shall not issue the permit.

(4) *Class I Variances.* The plan may provide that the owner or operator of a proposed source or modification may demonstrate to the Federal Land Manager that the emissions from such source would have no adverse impact on the air quality related values of such lands (including visibility), notwithstanding that the change in air quality resulting from emissions from such source or modification would cause or contribute to concentrations which would exceed the maximum allowable increases for a Class I area. If the Federal Land Manager concurs with such demonstration and so certifies to the State, the reviewing authority may: *Provided,* That applicable requirements are otherwise met, issue the permit with such emission limitations as may be necessary to assure that emissions of sulfur dioxide and particulate matter would not exceed the following maximum allowable increases over baseline concentration for such pollutants:

	Maximum allowable increase (micrograms per cubic meter)
Particulate matter:	
Annual geometric mean	19
24-hr. maximum	37
Sulfur dioxide:	
Annual arithmetic mean	20
24-hr. maximum	91
3-hr. maximum	325

(5) *Sulfur Dioxide Variance by Governor with Federal Land Manager's Concurrence.* The plan may provide that—

(i) The owner or operator of a proposed source or modification which cannot be approved under procedures developed pursuant to paragraph (q)(4) of this section may demonstrate to the Governor that the source or modification cannot be constructed by reason of any maximum allowable increase for sulfur dioxide for periods of twenty-four hours or less applicable to any Class I area and, in the case of Federal mandatory Class I areas, that a variance under this clause would not adversely affect the air quality related values of the area (including visibility);

(ii) The Governor, after consideration of the Federal Land Manager's recommendation (if any) and subject to his concurrence, may grant, after notice and an opportunity for a public hearing, a variance from such maximum allowable increase; and

(iii) If such variance is granted, the reviewing authority may issue a permit to such source or modification in accordance with provisions developed pursuant to paragraph (q)(7) of this section: *Provided,* That the applicable requirements of the plan are otherwise met.

(6) *Variance by the Governor with the President's concurrence.* The plan may provide that—

(i) The recommendations of the Governor and the Federal Land Manager shall be transferred to the President in any case where the Governor recommends a variance in which the Federal Land Manager does not concur;

(ii) The President may approve the Governor's recommendation if he finds that such variance is in the national interest; and

(iii) If such a variance is approved, the reviewing authority may issue a permit in accordance with provisions developed pursuant to the requirements of paragraph (q)(7) of this section: *Provided,* That the applicable requirements of the plan are otherwise met.

(7) *Emission Limitations for Presidential or Gubernatorial Variance.* The plan shall provide that in the case of a permit issued under procedures developed pursuant to paragraph (q)(5) or (6) of this section, the source or modification shall comply with emission limitations as may be necessary to assure that emissions of sulfur dioxide from the source or modification would not (during any day on which the otherwise applicable maximum allowable increases are exceeded) cause or contribute to concentrations which would exceed the following maximum allowable increases over the baseline concentration and to assure that such emissions would not cause or contribute to concentrations which exceed the otherwise applicable maximum allowable increases for periods of exposure of 24 hours or less for more than 18 days, not necessarily consecutive, during any annual period:

Maximum Allowable Increase

[Micrograms per cubic meter]

Period of exposure	Terrain areas	
	Low	High
24-hr maximum	36	62
3-hr maximum	130	221

(r) *Public participation.* The plan shall provide that—

(1) The reviewing authority shall notify all applicants within a specified time period as to the completeness of the application or any deficiency in the application or information submitted. In the event of such a deficiency, the date of receipt of the application shall be the date on which the reviewing authority received all required information.

(2) Within one year after receipt of a complete application, the reviewing authority shall:

(i) Make a preliminary determination whether construction should be approved, approved with conditions, or disapproved.

(ii) Make available in at least one location in each region in which the proposed source would be constructed a copy of all materials the applicant submitted, a copy of the preliminary determination, and a copy or summary of other materials, if any, considered in making the preliminary determination.

(iii) Notify the public, by advertisement in a newspaper of general circulation in each region in which the proposed source would be constructed, of the application, the preliminary determination, the degree of increment consumption that is expected from the source or modification, and of the opportunity for comment at a public hearing as well as written public comment.

(iv) Send a copy of the notice of public comment to the applicant, the Administrator and to officials and agencies having cognizance over the location where the proposed construc-

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tion would occur as follows: any other State or local air pollution control agencies, the chief executives of the city and county where the source would be located; any comprehensive regional land use planning agency, and any State, Federal Land Manager, or Indian Governing body whose lands may be affected by emissions from the source or modification.

(v) Provide opportunity for a public hearing for interested persons to appear and submit written or oral comments on the air quality impact of the source, alternatives to it, the control technology required, and other appropriate considerations.

(vi) Consider all written comments submitted within a time specified in the notice of public comment and all comments received at any public hearing(s) in making a final decision on the approvability of the application. The reviewing authority shall make all comments available for public inspection in the same locations where the reviewing authority made available preconstruction information relating to the proposed source or modification.

(vii) Make a final determination whether construction should be approved, approved with conditions, or disapproved.

(viii) Notify the applicant in writing of the final determination and make such notification available for public inspection at the same location where the reviewing authority made available preconstruction information and public comments relating to the source.

(s) *Source obligation.* The plan shall include legally enforceable procedures to provide that approval to construct shall not relieve any owner or operator of the responsibility to comply fully with applicable provisions of the plan and any other requirements under local, State or Federal law.

NOTE.—Incorporation by reference provisions approved by the Director of the Federal Register April 27, 1978.

[FR Doc. 78-16889 Filed 6-14-78; 4:15 pm]

[6560-01]

[FRL 904-3A]

PART 52—APPROVAL AND PROMULGATION OF STATE IMPLEMENTATION PLANS

1977 Clean Air Act Amendments to Prevent Significant Deterioration

AGENCY: Environmental Protection Agency.

ACTION: Final rule.

SUMMARY: By these final regulations, EPA amends its regulations relating to prevention of significant air quality deterioration (PSD) in order to implement the new PSD requirements of the Clean Air Act Amendments of 1977 (Pub. L. 95-95). As amended, the PSD regulations are now more comprehensive and stringent than they were. States may substitute comparable requirements through implementation plan revisions pursuant to regulations also being published today.

DATES: See §52.21(i) of the regulations.

FOR FURTHER INFORMATION CONTACT:

Darryl Tyler, Chief, Standards Implementation Branch, Control Programs Development Division, Office of Air Quality Planning and Standards, Research Triangle Park, N.C. 27711.

SUPPLEMENTARY INFORMATION:

INTRODUCTION

In 1974, EPA promulgated regulations under Section 101(b)(1) of the Clean Air Act (Act) to prevent emissions of sulfur dioxide (SO_2) and particulate matter (PM) from significantly deteriorating air quality in areas where concentrations of those pollutants were lower than the applicable national ambient air quality standards (NAAQS). 39 FR 42510 (codified at 40 CFR 52.21). EPA incorporated those regulations into the implementation plan (SIP) of each State. The regulations, as amended before August 7, 1977, prohibited construction of any stationary source in any of nineteen specified categories, unless EPA or a delegate State had issued a permit evidencing that the source would apply "best available control technology" (BACT) for SO_2 and PM and that emissions of those pollutants from the source would not cause significant deterioration of air quality in any area. For determining what levels of deterioration were significant, the regulations set out an area classification system. Under it, clean air areas could be classified as Class I, II, or III. In Class I areas, small increases of SO_2 and PM would be significant; in Class II areas, moderate increases; and in Class III areas, increases up to a NAAQS. The regulations classified all clean areas as Class II, but gave States, Indian Governing Bodies and Federal Land Managers the opportunity to reclassify their lands under specified requirements.

On August 7, 1977, the President signed into law new PSD requirements as part of the Clean Air Act Amendments of 1977 (1977 Amendments). These requirements follow the outline of the pre-existing regulations, but are in general more comprehensive and stringent. The permit requirements and classification system remain; but, among other things, many more sources are covered, Class II increments are different and sometimes more restrictive, Class III increments are now specifically defined, ambient ceiling requirements apply, BACT applies to all pollutants regulated under the Act, certain lands are permanently Class I, the procedures for reclassifying to Class III are more rigorous, the scope of the ambient impact analysis is much broader, and the opportunity for public comment on a proposed permit must include an opportunity for a public hearing. See Clean Air Act Sections 160-169 42 U.S.C. §§7470-79 (Clean Air Act Amendments of 1977, Pub. L. 95-95, §127(a), 91 Stat. 731), as amended, Pub. L. 95-190, Sections 14(a)(40)-(54), 91 Stat. 1401-02 (November 16, 1977) (technical and conforming amendments).

On November 3, 1977, EPA announced in the FEDERAL REGISTER several specific actions. The first was a final decision not to implement the new PSD requirements of Section 165 of the Act as of August 7, 1977, 42 FR 57459. The second, which embodied the first, was the promulgation of amendments to the pre-existing PSD regulations conforming them, not to Section 165, but primarily to Sections 162(a), 163(b) and 164(a) of the Act in accordance with Section 168(b). Id. Section 162(a) sets forth the new mandatory Class I areas; Section 163(b) identifies the new Class II and Class III increments and the ambient ceilings requirement; and Section 164(lists those areas which may not be reclassified as Class III and outlines the new Class III reclassification procedures. The third action EPA announced was the proposal of regulations giving guidance for the preparation of SIP revisions which would meet the new PSD requirements. Id. at 57471. The fourth action was the proposal of further, comprehensive amendments to the pre-existing PSD regulations. Id. at 57479. In announcing the proposals, EPA said that it intended to promulgate final regulations no later than March 1, 1978. Id. at 57459, 57471, 57479. Because Section 406(d)(2) of the 1977 Amendments directs the States to submit required SIP revisions within nine months of the promulgation of regulations giving guidance for their preparation, EPA also said that SIP revisions incorporating the new PSD requirements would be due no later than December 1, 1978. Id. at 57471, 57479.

On December 8, 1977, EPA published a supplement to the November 3 proposals. In the supplement, EPA clarified what sources the proposed amendments would exempt from the new PSD requirements, solicited comments on two additional issues, notified the public that technical and conforming amendments to the 197 Amendments had been enacted on No-

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vember 16, 1977, and stated that it would hold public hearings on January 9, 1978. 42 FR 52020.

On December 23, 1978, EPA extended, from January 3, 1978, to January 31, 1978, the deadline for submitting written comments on the November 3 proposals and on the Air Quality Modeling Conference held on December 14-15, 1978. 42 FR 64378. The conference was announced at 42 FR 58542 and 58561 (November 10, 1977). EPA noted in the December 23, 1977 notice that it might not be able to promulgate the new PSD regulations by March 1, 1978, and that it nevertheless intended to maintain "the previously-announced 'permit deadline' of March 1, 1978, for determining whether sources will be subject to the new PSD rules * * *."

On January 9, 1978, public hearings on the proposals took place in Washington, Chicago and Denver and are included as part of the written record. Transcripts have been made of the oral comments. On January 31, the comment period ended. EPA received more than 250 written comments on the proposals. EPA has considered in preparing the final regulations not only the oral and written comments on the proposals, but also the comments submitted in connection with the modeling conference. EPA has also had occasion to measure the proposals against concrete problems arising during and after the comment period.

The discussion which follows focuses on the important issues raised by the proposed amendments to the pre-existing regulation, summarizes the comments relating to each issue, and presents EPA's resolution. Elsewhere in today's FEDERAL REGISTER, EPA is announcing the promulgation of the necessary requirements for the preparation, adoption and submittal of State PSD programs. Since those regulations parallel these, both preambles should be read together. States should submit their SIP revisions no later than nine months from today.

HIGHLIGHTS

The regulations made final today apply to any source in any of 28 categories with a potential emissions increase of 100 tons per year or more of any pollutant regulated under the Act and to any source with a potential emissions increase of 250 tons per year or more of any pollutant regulated under the Act, including a source which would have been in one of the 28 categories if it were not under the applicable size cutoff. Potential emissions mean uncontrolled emissions.

Not all covered sources will receive full PSD review. Only those which would have allowable emissions equal to or greater than 50 tons per year, 1,000 pounds per day, or 100 pounds per hour, or would impact a Class I area or an area where the increment is known to be violated, will receive such review. However, the combined impact of sources not receiving full review will be determined periodically.

In general, only those sources with allowable emissions of 50 tons per year, 1,000 pounds per day, or 100 pounds per hour or more will undergo case-by-case review for BACT, and then only as to those pollutants regulated under the Act for which the source would be major.

To avoid duplicating State new source review, EPA will in general review a source which has allowable emissions under an enforceable SIP permit of less than 50 tons per year, 1,000 pounds per day or 100 pounds per hour, and which would impact no Class I area or area where an increment is known to be violated, only to the extent of ensuring that it would meet any applicable emission limitation and has undergone adequate public scrutiny.

Where PSD and nonattainment reviews both apply, the State must act first before EPA can issue final construction approval under PSD.

PSD applies irrespective of where a source would locate, except that it does not apply to any source which with respect to a particular pollutant is subject to the nonattainment requirements and would impact no clean air area.

The PSD increments must be protected through both preconstruction review and the SIP review process. If an increment is exceeded, the applicable plan must be revised. SIP relaxations submitted after today that would cause significant deterioration cannot be approved.

A Governor can upon written request exempt certain emission increases from consuming an applicable increment while EPA implements the PSD program. The State must submit an approvable PSD SIP revision incorporating the exemption within 9 months to retain the exemption.

Additional guidance is provided on what constitutes commencement of construction, particularly for sources constructing in several distinct phases.

PSD sources submitting applications after August 7, 1978, may have to provide extensive air quality monitoring data.

SOURCE APPLICABILITY

A. TRANSITION

In passing the 1977 Amendments, Congress left standing contradictory indications as to when it intended the new PSD requirements to be effective. On the one hand, Section 168 of the Act provides that the pre-existing PSD regulations, with amendments conforming them only to Section 162(a), 163(b) and 164(a), are to remain in effect as to a particular area until the applicable SIP is revised to include the rest of the new requirements. Section 406(b) of the 1977 Amendments reinforces Section 168. It provides in pertinent part:

> All * * * regulations * * * duly issued * * * pursuant to the Clean Air Act as in effect immediately prior to the date of enactment of this Act * * * shall continue in full force and effect after the date of enactment of this Act until modified or rescinded in accordance with the Clean Air Act as amended by this Act.

See also 1977 Amendments section 406(c). In effect, Section 168, and Section 406(b), say that, until EPA or the States revise the SIP's to include the new requirements, construction may commence after August 7, 1977, so long as it meets the requirements of the pre-existing regulations, as amended.

On the other hand, Section 165(a) can be read as prohibiting, until its requirements were met, most of the post-enactment construction that Section 168 would permit. It provides in pertinent part that "[n]o major emitting facility on which construction is commenced after the date of the enactment of this part, may be constructed in any area to which this part applies, unless" all of the new permit requirements are met. Also, Section 165(a) would have imposed a lengthy moratorium on new construction, since Sections 165(a)(2) and (e) require an analysis in accordance with regulations that as of August 7, 1977, had not even been proposed. Section 168 would not have imposed such a moratorium.

Because of the contradiction between Section 165 and 168, EPA had no choice but to fashion a reasonable program for the transition from the old to the new requirements. Accordingly, on November 3, 1977, it announced its final decision not to implement the requirements of Section 165 as of August 7, 1977, and its promulgation of the Section 168 amendments to the pre-existing regulations. Then, in the subsequent November 3 proposal and the December 8 supplement, it proposed to apply the requirements of Section 165 as of March 1, 1978. Under the proposal, the requirements would apply to construction of a major stationary source or major modification occuring on or after March 1, 1978, unless the source or modification had received certain permits before March 1 and construction commenced before December 1, 1978. The permit that a source subject to the pre-existing regulations would have to get was a permit under those regulations. A source not subject to the pre-existing regulations would have to get the permit or permits required under the applicable SIP.

In their comments on this proposal, industries asserted that EPA was with-

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out legal justification to implement any regulations prior to the submittal of SIP revisions. At the other extreme, some environmental groups contended that EPA was acting improperly in not making Section 165 effective as of August 7, 1977. State agencies generally indicated approval of the proposal.

Today, EPA is announcing that it has promulgated the proposed program with only a minor change. For the December 1, 1978 date, it has substituted a date nine months from today.

Three major considerations have shaped this transition program. One is that the rate of consumption of the increments should be minimized. A paramount goal of both the House and the Senate was to give the States a full opportunity to revise and implement their own PSD programs. The value and significance of this opportunity diminishes as the increments are consumed during the period from August 7, 1977, to the time EPA has approved any PSD revisions to the SIP. Hence, during that period, the rate of consumption of the increments should be minimized. The other two major considerations are that economic disruption should be minimized and that orderly administration of the new requirements should be maximized.

The first of the relevant considerations pulls sharply in the direction of implementing the new requirements as of August 7, 1977. The more sources that must apply BACT, the slower the rate of consumption of the increments. The new PSD requirements might subject up to twenty-four times[1] as many sources to a more restrictive control technology review as did the old requirements. In doing so, the new requirements will capture approximately 230,000 tons of PM, and 570,000 tons of SO_2, per year, beyond what the old requirements would have captured.[2] While such capture is clearly significant to increment consumption on a national basis, it could be even more significant to individual localities where more than one of the affected sources might construct and consume a large portion of the available increment. Hence, the sooner EPA implements the new requirements, the slower will be the rate of increment consumption. Other less compelling considerations pull in that direction, too. Until the new requirements are implemented, mandatory Class I areas will not have the protection Section 165(d) affords nor will variances to the Class I increments be available. In addition, until then, Federal Land Managers will continue to have the power to reclassify Federal lands, and EPA will continue to be able to disapprove reclassifications on other than procedural grounds.

The other two major considerations, however, suggest the opposite conclusion. Immediate implementation of the new requirements would have resulted in severe economic disruption. As stated above, Section 165(a) would have imposed, because of Sections 165(a)(2) and (e), a moratorium on new construction equal to the length of time required to promulgate the necessary regulations.[3] Even if Sections 165(a)(2) and (e) were ignored, undue economic disruption would have resulted from sudden imposition of the new requirements. Applicants had designed major construction projects to meet the old PSD requirements and the State new source review requirements as applicable. Many of them had not commenced construction by August 7, 1977, but had either obtained a permit or were about to obtain one. Reevaluation under the new requirements would have meant that construction could not have commenced until long after the time originally planned. The applicant would often have had to repropose control technology and provide analyses of the direct and indirect total environmental effects of the source. EPA would then have had to redetermine the necessary control equipment and open any redeterminations to public comment, including a public hearing.

Immediate implementation also would have promoted disorderly administration, since it would have precluded normal notice and comment and the attending opportunity to better understand the statute, anticipate its effects and establish generic ground rules. Each issue would have been refought with each new application. In the absence of generic rules, inconsistency and confusion in the treatment of applications throughout the country might well have occurred.

The transition program promulgated today is reasonable. It has equitably accommodated these competing considerations. It has allowed informed development of generic rules and minimized economic disruption by avoiding entirely a lengthy moratorium on new growth and amply forewarning the public of the time when the new requirements would have to be met. At the same time, the program has minimized the period of time during which the new requirements were not working to slow consumption of the increments. It has also minimized the time during which mandatory Class I areas lacked the protection of Section 165(d), Class I increment variances were unavailable, Federal Land Managers were able to reclassify Federal lands, and EPA was able to disapprove reclassifications on other than procedural grounds.

Four aspects of the program require further explanation. First, why is EPA implementing the new requirements as of March 1, 1978, rather than the date of promulgation? In effect, EPA has suspended the issuance of PSD permits from March 1 to the date of promulgation. The consequence of implementing them as of promulgation would have been that sources would have consumed the increments to a much greater extent than they have. In addition, the public has received early and ample warning of the March 1 deadline and therefore an adequate opportunity to plan for this short-term impact on construction schedules. Finally, in accordance with a directive dated February 22, 1978, from the Assistant Administrator for Air and Waste Management and the Assistant Administrator for Enforcement, EPA has upon request reviewed certain applications as to their approvability under the proposed regulations.

Second, why exempt from the new requirements those sources which have received a PSD permit before March 1, 1978, even though construction on the source may not have commenced by then? Arguably, to exempt only those sources on which construction had commenced before this date would have paralleled the approach in Section 165, better served the policy of slowing increment consumption and not disserved the policy of ensuring an adequate opportunity for public comment. It would not, however, have minimized economic disruption. In October of 1977, many sources for which PSD applications had been completed and were pending could not have both received a permit and commenced construction before March 1, 1978. Their potential consumption of the increment beyond what they would have consumed under the new requirements was not so great as to warrant denying

[1] The pre-existing regulations applied to sources belonging to any of nineteen specified categories, or approximately 165 per year. The new requirements apply to any source in any of 28 specified categories which has the potential to emit 100 tons per year or more of any pollutant regulated under the Act and to any other source which has the potential to emit 250 tons per year or more of any such pollutant. Defining "potential to emit" as maximum capacity in the absence of control equipment, as do these regulations, the annual number of covered sources is estimated to be about 4,000 with approximately 1,600 sources being subject to a detailed BACT and ambient air quality review.

[2] Under the old requirements, annual emissions from all new and modified sources, whether covered or not, totalled approximately 770,000 tons of PM and 1,220,000 tons of SO_2. EPA estimates that for these same sources under the new requirements annual emissions will be reduced to 540,000 tons for PM and 650,000 tons for SO_2.

[3] The legislative history contains strong indications that Congress intended not to impose a moratorium on development. See H.R. Rep. No. 95-294, at 171 (1977); Congressional Record—House, August 4, 1977.

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them an opportunity for exemption. Hence, EPA proposed, and has decided, to exempt sources for which a PSD permit had been obtained before March 1, 1978, so long as construction commences by the time SIP revisions are due.

Third, EPA as previously proposed has also decided to exempt sources not subject to the pre-existing regulations if they have received before March 1, 1978, all permits required under the applicable SIP, even though construction may not have commenced by then. Not to exempt these sources, arguably, would have better served the policy of slowing increment consumption. Nevertheless, there were many such sources in circumstances not significantly different from those of sources with PSD permits pending in October of 1977. Hence, out of fairness, EPA has decided to exempt such sources, so long as construction commences by the time SIP revisions are due.

Finally, in establishing a deadline for commencement of construction, why is EPA using a date nine months from today, instead of December 1, 1978, as proposed? EPA originally set the deadline nine months from March 1, not because March 1 was the date of implementation, but rather because it was the anticipated date of promulgation. EPA selected the nine month period after promulgation because it provided ample opportunity to commence construction and it is the period within which Section 406(d) in effect requires States to submit their SIP revisions. Consequently, the Administration has revised the December 1, 1978, date to coincide with a date nine months from promulgation of these regulations.

B. EDF V. COSTLE

On February 17, 1978, the Environmental Defense Fund, Inc. (EDF) brought an action in the District Court for the District of Columbia challenging EPA's November 3, 1977 decision not to implement the new PSD requirements as of August 7, 1977. On February 24, 1978, the Court issued an order which governed the further processing of pending applications to EPA for PSD permits under the pre-existing regulations and will affect the application of the March 1, 1978, and commence construction deadlines. The order expired on March 28, 1978. It provided in pertinent part:

2. EPA shall process all applications for PSD permits that do not comply with the requirements of Section 165 according to its existing procedures *except that*, in the case of any permit which EPA concludes it would issue (but for the existence of this order), EPA shall, on the date on which EPA so concluded, mark every such permit:

This permit would issue this date (date), but for the order entered in *Environmental Defense Fund v. Douglas M. Costle*, No. 78-281 (D.D.C.) (Entered on February 24, 1978).

EPA shall give prompt notice of the above action to the permittee and all appropriate State and local authorities. The above action shall not constitute permission to commence construction, nor shall it constitute final action for purposes of judicial review.

3. If and when any permit marked as described in paragraph 2 is issued, such permit shall be effective and considered to have been issued as of the date on which it was so marked and shall be subject to the relevant regulations applicable on such date.

4. In addition, any deadline which determines the applicability of EPA regulations under the Clean Air Act to any facilities receiving such permits shall be extended by a period of time equal to the number of days between the time EPA marks the permit as described in Paragraph 2 and the date when EPA releases the permit as described in Paragraph 7.

In accordance with paragraph 3 of the order, EPA will treat any permit marked pursuant to paragraph 2 and released after the order expired as having been issued as of the date it was marked for the purpose of determining whether the source is exempt from the new PSD requirements under the March 1, 1978, program. Also, in accordance with paragraph 4, construction on a source which has received or will receive a marked permit need commence, not within nine months from today, but rather within a period equal to nine months from today plus the number of days between the time the permit was marked and the time it was released.

C. SPECIAL EXEMPTIONS

In the March 8, 1978, FEDERAL REGISTER (42 FR 9529), EPA announced a final decision, made on February 28, 1978, to exempt from the new PSD requirements any source the evaluation of which EPA would have completed before March 1, 1978, but for an extension of the public comment period pursuant to a meritorious request for such an extension. The Administrator communicated this final decision to each of the Regional Administrators. His statement to them, which appeared in the FEDERAL REGISTER on March 8, 1978, follows:

As some of you are aware, significant public comment has been generated in the case of certain sources that have submitted applications for PSD permits. In some of these cases, interested persons have requested additional time to comment on the propriety of granting the permit. While I do not believe that the situations are many, I am concerned about the completion of any PSD review of any case where an extension of the comment period has been requested on meritorious grounds. Accordingly, by this notification I am announcing a policy change regarding the March 1 PSD deadline. This policy change will be applicable only to those situations where the normal public comment period has ended and EPA review of a permit would have been completed by March 1, were it not for a reque for additional comment time requested b interested parties.

In the case of any such situation, d scribed above, the comment period involve may be extended as provided by EPA's cu rent PSD regulations. Where such an exte sion is granted, the March 1 date now desi nated as the effective date of the new PSI requirements will not apply to that permi application. Instead, the permit applicatio may continue to be processed (and grante or denied) under EPA's current PSD regula tions.

I intend to put a notice in the FEDERA REGISTER to the above effect. I wish t reemphasize that the policy set forth abov only applies to those situations wher review would have been completed b March 1 absent our action granting a re quest for additional comment time.

D. POTENTIAL EMISSIONS

Section 165 of the Act requires that each new or modified "major emitting facility" undergo preconstruction or premodification review for PSD. Section 169(1) defines "major emitting facility" in terms of a source's "potential to emit." On November 3, 1977, EPA proposed to define "potential emissions" as "those emissions expected to occur without control equipment * * *" 42 FR 57479, 57483.

Virtually every comment spoke to the issue of subjecting sources to PSD review on the basis of their uncontrolled emissions. Industry and State pollution control agency comments noted that the Agency's interpretation would needlessly force through PSD review several sources whose allowable emissions would be relatively insignificant. Allowable emissions are those that would occur after the application of the controls required under any air pollution control laws and regulations or more stringent controls under an enforceable permit. Many State and local agencies expressed a deep concern that subjecting sources to the PSD requirements solely on the basis of uncontrolled emissions would result in an unmanageable number of detailed and costly reviews. The organization representing State air pollution control agencies, State and Territorial Air Pollution Program Administrators (STAPPA), urged the Agency to consider both uncontrolled emissions and allowable emissions in determining which sources would be subject to review. It suggested that EPA assess the air quality impact of only those sources whose allowable emissions would be significant. Industry comments uniformly urged the Agency to interpret "potential to emit" as referring to allowable emissions.

The Agency has decided to apply PSD solely on the basis of what a source might emit without control. The final regulations published today define "potential to emit" as the "capability at maximum capacity to emit a pollutant in the absence of air pollu-

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tion control equipment." See § 52.21(b)(3).

The Agency has concluded that Congress intended "potential to emit" to refer to uncontrolled, not allowable, emissions. If Congress had intended PSD to apply on the basis of allowable emissions, it would not have included Section 165(b) in the Act. Section 165(b) provides that an applicant for a PSD permit for a modification to certain major emitting facilities need not show that the modification will not cause or contribute to a violation of a Class II increment, if the "allowable emissions" of SO_2 and PM from the modification would after the application of BACT "be less than fifty tons per year" and would not cause or contribute to a violation of the applicable NAAQS. Section 169(1) defines "major emitting facility" as a source with the "potential to emit" either, depending on its type, 100 or 250 tons per year or more. If Section 169(1) were read to subject to PSD only those modifications with allowable emissions equal to or greater than 100 or 250 tons per year before the application of BACT, no owner or operator whose modification would emit less than 50 tons per year after BACT would need the relief Section 165(b) provides. This is because, if BACT or some less stringent control could reduce the emissions of the modification to less than 50 tons per year, the owner or operator would apply it in order to reduce the emissions of the modification to below the applicable 100 or 250 ton cutoff and thereby avoid PSD altogether. Congress, however, did include Section 165(b). Hence, it appears that Congress did not intend PSD to apply on the basis of allowable emissions. *See also* Sen. Rep. No. 95-127, at 33 (1977) (last paragraph). Since the only other concept to which Congress could have been referring is that of uncontrolled emissions, it must have intended PSD to apply on the basis of such emissions.

There is another similar reason for reaching that conclusion: if Congress had intended PSD to apply on the basis of emissions after controls, it would not have used the phrase "potential to emit" in Section 169(1).[4] First, Congress would not have used two different phrases to refer to the same concept, and it had already used "allowable emissions" in Section 165(b). Second, Congress knew that EPA had already established in its offset policy for nonattainment areas (41 FR 55524 (December 21, 1976)) the phrase "allowable emissions" as denoting emissions after controls. Pub. L. 95-95, section 129(a)(1), 91 Stat. 745 (1977). Indeed, Congress has been careful to distinguish "allowable emissions" from at least one other concept. Prior to the enactment on November 16, 1977, of technical and conforming amendments to the 1977 Amendments, Section 165(b) contained the phrase "actual allowable emissions." Id. section 127(a), at 736. The November 16 amendments deleted the word "actual" in order to "eliminate an apparent inconsistency." 123 Cong. Rec. H11955, H11957 (November 1, 1977). Finally, the legislative history indicates that Congress knew that in the air pollution field the phrase "potential emissions" has traditionally been understood to denote uncontrolled emissions. *See e.g.* Sen. Rep. No. 95-127, at 45, 96-97 (1977).

The Agency has decided to apply PSD on the basis of uncontrolled emissions also for an important practical reason. In enforcement programs, reporting systems have been and must be based on uncontrolled emissions. Otherwise a source with controls to capture 90 percent of the potential emissions might well be below the cutoff for reporting, but could virtually turn off the control equipment, emit 10 times the allowed level and not be tracked.

In its November 3 definition of "potential emissions," EPA indicated that, in determining the potential emissions of a source, it would not take into account emissions that "necessary" or "integral" control equipment would capture. Equipment was "necessary" or "integral" if business or production consequences would follow, independently of applicable air pollution laws and regulations, from removing or not using the equipment. Several comments pointed out that such a general credit could not realistically be implemented, since the permitting authority would be faced frequently with having to make difficult case-by-case factual determinations. Considerable time would be lost by both the applicant and the permitting authority in making such case-by-case decisions.

In view of these comments, the Agency will interpret the phrase "air pollution control equipment" in the definition of "potential to emit" as referring to control equipment which is not, aside from air pollution control requirements, vital to production of the normal product of the source or to its normal operation. The Agency will consider equipment vital if the source could not produce its normal product or operate without it.

E. TWO-TIERED REVIEW

By the proposed regulations, EPA indicated its intention to subject each new major stationary source and major modification to full PSD review. Full review would have consisted of (1) a case-by-case BACT determination as to each pollutant regulated under the act for which the source or modification would be considered major, (2) ambient impact analyses of whether the source or modification would cause or contribute to a violation of the applicable increments and NAAQS, (3) an assessment of the direct and indirect effects of the source or modification on visibility, soils, and vegetation, and (4) public comment, including an opportunity for a public hearing, on each material determination. Full review might also have entailed an analysis of the effects of the source or modification on air quality related values in a class I area. Finally, full review might have required the applicant to submit extensive air quality monitoring data and to commit to post-construction monitoring.

As noted above, STAPPA predicted that the States would find PSD applications too numerous, and their review too costly, to manage. STAPPA and others asserted that full PSD review would contribute unduly to the construction costs experienced by small, otherwise well-controlled sources.

In response to these comments, EPA attempted to quantify the effects of full PSD review under the proposal. It estimated that the new requirements would cover approximately 4,000 sources and modifications per year. The old PSD regulations, by contrast, covered only 165 sources per year. EPA also projected that permitting authorities would have to devote approximately 279 more man-years of new source review effort to conduct full PSD review of these new sources (or an additional 65 percent of their present effort on new source review), and that applicants would have to spend up to $6 million on modeling and $24 million on monitoring (or $30 million in total) to obtain PSD permits for these sources.

Applicants would also have to spend additional time and money meeting the requirements of a detailed PSD review. Considerable delay costs are expected from the increased planning and construction costs as well as the foregone return on investment from delaying start-up for a new source. Although it is not possible to accurately quantify the amount of these costs due to their site-specific nature, such costs could be greater than the monitoring and modeling costs of $30 million. In addition the changeover from reviewing 165 sources to 4,000 sources per year would probably lead to delays in the start-up of new sources.

Section 165(b) of the act shows that Congress shared the concern of STAPPA and the other commentators. As noted above, section 165(b) exempts certain modifications with allowable emissions of less than 50 tons

[4] Part D of the Act parallels Part C in its usage of the phrases "allowable emissions" and "potential to emit." Section 173(1)(A) refers to "allowable emissions," whereas the section defining those sources to which Part D applies, Section 320(j), uses the phrase "potential to emit."

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per year after the application of BACT from demonstrating that they would not cause or contribute to a violation of any applicable class II increment, and thus from substantial expenditures on modeling and monitoring. The Senate Committee explained:

> Section [165(b)] exempts smaller, well-controlled sources which are expansions of existing facilities from having to demonstrate compliance with the class II increments. Many such sources which are *small and relatively insignificant with respect to air quality* would otherwise be brought under the requirements of [Part C] by the "major emitting facility" definition of 100 tons per year potential emissions of any pollutant.

Sen. Rep. No. 95-127, at 33 (1977) (emphasis added).

Following Congress lead, EPA attempted to quantify the effects of expanding the exemption in section 165(b) to all new sources and modifications with less than 50 tons per year allowable emissions. Analysis revealed that under such an exemption only 1,600 of the 4,000 sources per year are likely to undergo full PSD review, that permitting authorities would need to devote only an additional 112 man-years to the effort of reviewing those 1,600 sources fully if the remaining 2,400 are first reviewed under the State new source review program, and that applicants might now have to spend only about $2 million on modeling and $7 million on monitoring (or $9 million in total).

Delay costs would also be reduced significantly. The sources exempted from the full PSD review would typically be small. The average size of the investment for these sources is thought to be about $1 million. If delays of two months occur for each of these 2,400 sources, this could lead to delay costs from foregone returns on investment of about $16 million. (This is based on an estimated four percent difference between the rate of return for a new source and the investor's next best alternative, an average two-month delay and an average new source investment of $1 million.) Delay costs would be higher in those cases where the delay leads to increased construction and planning costs.

Subsequent analysis indicated that the costs of making a case-by-case BACT determination each year for each of the 2,400 sources with allowable emissions under an enforceable SIP construction permit of less than 50 tons per year far outweighed the benefits of such a determination. EPA estimated that the applicable SIP would in many cases impose its own BACT requirement. To conduct a PSD BACT review of those sources would be pointless. In the other cases, applicants would incur the expense of preparing a BACT proposal and the associated delay for review and approval by the permitting authority. Permitting authorities would have to expend the necessary time and effort to make the BACT determination. For EPA, this determination would in general require it to duplicate much of the effort that the State permitting authority had already expended in becoming knowledgeable about the source. The benefits, in contrast, are relatively insignificant. EPA estimates that BACT applied by virtue of PSD review to the 2,400 50-ton sources would capture annually only 300 tons more of SO_2 and 8,000 tons more of PM than what those controls that the source would install in order to meet the 50 tons per year cutoff would capture. 300 tons is less than 1 percent of the estimated total new emissions of SO_2 per year, while 8,000 tons is less than 2 percent of the estimated total new emissions of PM per year.

In light of section 165(b) and these findings, EPA has decided generally to exempt from full PSD review any new major stationary source or major modification (hereafter, a "major new source") which would have allowable emissions of less than 50 tons per year, 1,000 pounds per day, or 100 pounds per hour, whichever is more restrictive (hereafter, a "50-ton source"). The 100 pounds per hour criterion, it should be noted, would apply only with respect to a pollutant for which an increment or standard for a period less than 24 hours had been established. For example, the criterion would apply to a source with respect to SO_2, but not PM.

In accordance with the decision, under § 52.21(j), no 50-ton source need apply BACT in order to get a PSD permit. An applicant must demonstrate, however, that the source would meet all applicable emission limitations under the SIP and all applicable emission standards and standards of performance under 40 CFR part 60 and part 61. An applicant may demonstrate that the source would meet those limitations and standards by presenting an enforceable SIP permit under which the source would have to meet them. Any major new source with allowable emissions equal to or greater than 50 tons per year, 1,000 pounds per day, or 100 pounds per hour would be subject to the case-by-case BACT requirement.

Under § 52.21(k), no applicant for a PSD permit for a 50-ton source would have to demonstrate that the source would not cause or contribute to a violation of an applicable increment or NAAQS, to assess the direct and indirect effects of the source on visibility, soils and vegetation, and to provide monitoring data, unless the source would impact a class I area or an area where an applicable increment is known to be violated.

To ensure that air quality does not deteriorate beyond the level of any increment, EPA will periodically assess increment consumption in an area. For the same purpose, it has, in the part 51 regulations also published today, imposed on each State the same obligation as well as the obligation to revise its SIP to cure the violation of any increment. It should be noted, too, that the assessment of increment consumption must be subject to public comment and an opportunity for a public hearing.

Finally, under § 52.21(r), the issuance of a PSD permit to a 50-ton source would be subject to public scrutiny only if and to the extent that the underlying determinations had not been previously subject to public scrutiny. For example, if the State in granting a SIP permit provided an opportunity for only written comment on whether the source would meet the applicable emission limitations and standards, then EPA would require an opportunity for a public hearing on those questions and an opportunity for written comment and a public hearing on whether the source would impact a class I area or an area where the increment is known to be violated. The purpose of this public participation exemption is to avoid duplication of effort. Applicants should be prepared to prove to what extent the public had an opportunity to scrutinize the issuance of the SIP permit.

The general exemption for 50-ton sources is consistent with the relevant purposes of the new PSD requirements as set forth in sections 101(b)(1) and 160 of the act: to prevent significant deterioration of air quality, to "preserve, protect and enhance" air quality over class I areas, and to assure that any decision to permit increased air pollution is made only after careful evaluation and informed public participation. Nondeterioration is assured since increment consumption will be assessed periodically and SIPs revised to cure any violation. Class I areas are fully protected, since the exemption does not apply as to them. Finally, each material determination behind the issuance of a PSD permit will be subject to at least one round of public participation.

The exemption, moreover, is within the spirit of section 165(b). Each year it will avoid imposing an unnecessary expenditure of up to $21 million on approximately 2,400 controlled sources of relatively insignificant air quality impact. It will, in addition, conserve substantial Federal and State resources for other, more important air pollution control tasks. Finally, the exemption will encourage improvements in control technology, since potential applicants will strive to reduce their emissions below 50 tons per year in order to be eligible for the streamlined review process.

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EPA has included the short-term criteria of pounds per day or per hour to ensure that seasonal or intermittent operation of sources which have significant short-term emissions will be subject to review. Industries which commented uniformly felt that the Agency was without legal ability to implement the short-term criteria. The act does not, however, preclude the use of short-term criteria and, in fact, seems to require their use in those cases where short-term increments and NAAQS have been established. The short-term criteria would not apply under the regulations where no counterpart increment or standard had been established. State agency comments agreed that short-term criteria would be an important and necessary mechanism to assist in the protection of short-term increments and national ambient air quality standards.

F. OTHER EXEMPTIONS

The regulations promulgated today incorporate several other review exemptions. These exemptions will streamline the review process so that the review will focus on those sources of real air quality significance.

The exemptions are effective only when the public has been afforded an opportunity to comment on any material determinations. Also, protection of increment is assured by, first, not allowing a review exemption that might affect a class I area or an area where an applicable increment is known to be violated and, second, by EPA (or the State when implementing PSD) periodically reviewing the aggregate air quality impacts of unreviewed sources. Such periodic reviews of aggregate impacts, as mentioned above, shall be subject to public comment and an opportunity for public hearing. Additionally, the relevant impact of emissions of all previously unreviewed sources must be included in the review of any source subject to ambient air impact analysis.

Under the first exemption, any major source subject to nonattainment offset requirements for a particular pollutant which would impact no clean air area is not subject to PSD review for that pollutant. Review of such a source would be pointless. The nonattainment requirements would impose LAER, a limitation more stringent than BACT, and would ensure that the source would not contribute to a violation of any applicable NAAQS. Since the source would impact no clean air area, ambient review would be unnecessary to forestall any significant deterioration.

Temporary sources are also exempt from full PSD review, since their ambient air impacts are short-lived. Temporary emissions include, but are not limited to, those from a pilot plant, portable facility, construction or exploration. Emissions occurring for less than 2 years at one location would generally be considered temporary. Emissions for longer periods of time might also be considered to be temporary (such as the emissions related to the construction of power plants or other large sources), but should be dealt with on a case-by-case basis. Additionally, once a portable facility has received a PSD permit, it may relocate without undergoing PSD review: *Provided*, That the source notifies the reviewing agency of such relocation 30 days in advance, the proposed relocation would impact no class I area and no area where the increment is known to be violated, and emissions from the facility would not exceed allowable emissions.

The Agency's proposed PSD regulations stated that if an emitting unit within a source were modified so as to increase potential emissions by 250 tons per year (100 tons for certain listed source types), the unit be required to install best available control technology even if accompanying emission reductions within the source totally offset the new emissions. Industry roundly criticized this proposal as an unauthorized extension of the PSD program to situations where no threat of worsening air quality would exist. After a careful review of the meaning of "modification" in the PSD provisions of the act and consideration of the potential air quality effects of intrasource pollutant tradeoffs, the Agency has decided to adopt a regulatory scheme that in part accommodates industry's expressed concerns.

The regulations apply the definition of "modification" to the entire source (plant), with the result that if net emissions from the source do not increase when an existing unit is revamped, the source would not require full PSD review. This exemption would not be applicable as to BACT in situations where a major facility is added to or is reconstructed at a source, whether the addition is to replace previous production capacity or for growth.

The Agency believes that this approach is consistent with Congress' use of the term "modification" in section 169(2)(C). In adopting that section, one of the November 1977 "technical and conforming amendments" to the 1977 amendments, Congress said that it was honoring the conference agreement by conforming the terminology to its use in section 111, the provision on new source performance standards. At the time the conferees reached agreement and at the time the technical amendments were enacted, "modification" in section 111 had been interpreted by EPA regulation to allow source owners and operators to avoid the application of new source performance standards to changed existing facilities whose emissions would increase, if that increase were totally offset elsewhere in the source. Although the EPA interpretation was overturned by a United States court of appeals in early 1978 (*ASARCO* v. *EPA*, 11 ERC 1129 (D.C. Cir.)), there is no reason to believe that the Congress in late 1977 did not regard the definition, which had existed as law since 1975, as being well-suited to its purposes in the PSD program.

Under the regulations, source owners or operators who claim to be undertaking a modification exempt from the PSD program because of intrasource tradeoffs will typically not be allowed to obtain credit for reducing emissions from stacks while increasing emissions from roof monitors or other low-level emission points. Stack and nonstack emissions generally have very different impacts on air quality in areas near a source. Since the PSD program is ultimately concerned with effects on air quality, EPA does not feel bound to apply mechanically the pre-*ASARCO* case definition of "modification" in section 111, a section directed toward technology, so as to frustrate the air quality protection purpose of PSD.

The effects of treating "modifications" as discussed above will be that modifications to existing facilities v not require installation of best ava ble control technology determined on a case-by-case basis, if the owner or operator demonstrates that zero net emissions would attend the change. The delay and expense involved in those determinations will, therefore, be avoided. Any applicable new source performance standards will, however, apply to modified facilities in accordance with the *ASARCO* decision.

The Administrator intends to use the following criteria in determining whether a no net increase exemption for a modified facility from the BACT requirement would apply: (1) All emission reductions from sources included in the baseline will be credited in terms of actual emissions using reasonable assumptions for operating conditions, except in two cases. Where a SIP revision was pending as of August 7, 1977, the applicable SIP as later relaxed would represent the baseline for crediting emission reduction. Changes in allowable emissions will also be used to credit reductions from major construction which commenced before January 6, 1975, but was not yet operating by August 7, 1977. For emission reductions from major construction previously approved to consume portions of an increment, allowable emissions as expressed in the PS permit will be the basis for determining reduction credit. (2) All reductions must be enforceable (e.g., contained in the permit) and proposed in conjunc-

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tion with the source undergoing preconstruction review. Proposed reductions must occur or have occurred before construction is complete. In determining whether no net increase would occur, credit will be given only for emission reductions accomplished in conjunction with the proposed modification. (3) The reduction(s) must equal or exceed those allowable emissions approved for the proposed construction. This determination will generally be made on a pounds-per-hour basis when all facilities involved are operating at their maximum expected production rate. When reductions are proposed on a tons-per-year basis, actual annual operating hours for the previous 1- or 2-year period will be used, as appropriate. (4) All proposed emission reductions must not be otherwise needed to provide for additional growth already approved. Finally, (5) air quality need not improve at every location affected by the proposed construction but on balance the affected area should not be adversely impacted.

The Administrator further believes that all new or modified facilities within sources without a net emission increase should generally be exempt on a pollutant-specific basis from the detailed ambient review requirements. In most cases no useful purpose is served by requiring an air quality impact review of sources that would obviously not degrade air quality. This exemption is not intended to apply when the source would impact a class I area or an area where the increment is known to be violated. The Administrator generally intends to use the same criteria as mentioned above for BACT exemptions in determining if a zero emission increase exemption for ambient review would apply. However, in contrast to the analysis required in the case of modified facilities seeking exemption from BACT review, the no net emission increase analysis employed for purposes of exemption from the ambient review shall take into account all emission increases and decreases occurring at the source since August 7, 1977.

G. FUGITIVE DUST

Several comments from representatives of strip mine and other surface mining interests questioned whether Congress intended dust emissions from surface mines resulting from mobile source activity and the action of the wind on exposed surfaces to be taken into account in reviewing the mines for PSD. The commentors contended that Congress only intended PSD review to apply to "stationary" sources and that mobile source activity and the action of the wind were not stationary sources. While Congress apparently did intend PSD to apply to stationary sources only, surface mines are stationary sources. Consequently, dust emanating from them should not be excluded from PSD review merely on the basis of what causes it to become airborne.

It was also argued that surface mines should receive some relief from strict consideration of ambient particulate concentrations associated with surface mining activities. A number of arguments were presented: that a large majority of the associated particulate matter is nonrespirable; that mining activity occurs in areas with limited population; that the particulate matter arises at ground level and falls out within very short distances; that visibility is not affected because the light scattering which hinders visibility is caused by smaller particles; and that even after the application of BACT, short-term particulate standards for NAAQS and PSD increments might not be met.

In view of these comments and other studies,[6] EPA has decided to exclude from any air quality impact assessment of a source or modification any fugitive dust that would emanate from it. "Fugitive dust", as defined in the regulations, consists of particles of native soil which is uncontaminated by pollutants resulting from industrial activity. Fugitive dust may come from haul roads or exposed surfaces through the action of man or the wind or both.

Additional support for this exclusion can be found in the legislative history. It points to the utilization of "administrative good sense" regarding fugitive dust (see S. Rep. No. 95-127, at 98 (1977)) and suggests that Congress did not intend PSD to prohibit surface mines of an economically viable size (see H. Rep. No. 95-294, at 165-66 (1977)). In addition, accurately assessing the short-term ambient impact of fugitive dust is often not possible. The Agency will continue its efforts to develop better short-term modeling techniques for fugitive dust.

Certain aspects of this exclusion for fugitive dust should be noted. First, the burden of showing to what extent emissions from the proposed source or modification would be made up of fugitive dust rests with the applicant. Second, the regulations do not exclude fugitive dust from the determination of potential emissions. Any source or modification which, taking into account emissions of fugitive dust, would have potential emissions equal to or greater than 250 tons per year would be subject to the applicable PSD requirements, especially in many instances the BACT requirement. Finally, EPA will treat emissions of fugitive dust as not consuming increment for the purpose of evaluating other sources under PSD.

The Administrator would like to emphasize that EPA intends to implement the above policy of excluding the fugitive dust only on an interim basis. EPA will reassess the implications of the policy and any possible technical improvements in modeling fugitive dust, and will adjust the policy as appropriate.

H. COMMENCE CONSTRUCTION

It is important in many cases to determine whether a source has commenced construction by a certain date. If a source commenced construction before June 1, 1975, it would be exempt (or "grandfathered") from PSD review altogether. 40 CFR 52.21(d). If a source commenced construction before August 7, 1977, it would be exempt from the amendments that EPA promulgated on November 3, 1977. 42 FR 57459. Finally, certain major stationary sources or major modifications will be exempt from today's final regulations if they obtained all applicable air pollution permits by March 1, 1978, and commence construction before 9 months from today.

In determining whether construction has "commenced," as that term is defined in section 169(2) of the act, it is first necessary to determine whether the owner or operator has obtained and continues to hold all necessary preconstruction approvals or permits required by Federal, State, or local air pollution emissions and air quality laws or regulations under the applicable State implementation plan. If all such permits have not been obtained or maintained, the inquiry can stop; this requirement is a prerequisite for finding that construction has commenced.

Assuming that the permit requirement is satisfied, it is still necessary to determine whether the source meets one of two additional requirements. The first requirement is that a continuous, physical on-site construction program has begun by the date in question and will be completed within a reasonable time. The words "continuous" and "on-site" are key to this test. It will not suffice merely to have begun erection of auxiliary buildings or construction sheds unless there is clear evidence (through contracts or otherwise) that construction of the entire facility will definitely go forward in a continuous manner (no breaks greater than 18 months). Nor will it suffice that erection of certain components began off-site.

The second requirement is that by the date in question binding agree-

[6] *NW Colorado Environmental Impact Statement*, Department of Interior, 1976; *Survey of Fugitive Dust from Coal Mines*, EPA 908/1-78-003, February, 1978; *Impact of Significant Deterioration Proposals Upon Western Surface Coal Mining Operations*, Federal Energy Administration, May 5, 1976.

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ments were established for construction of the facility to be completed within a reasonable time. From the legislative history, it is clear that boiler contracts, even those with penalty clauses, will typically not suffice. See S. Rep. No. 95-127, at 32-33 (1977). The source must enter into a site-specific commitment through contracts.

The act specifies that the agreements must be ones "which cannot be cancelled or modified without substantial loss". The word "substantial" is clearly key to this test. EPA proposed for public comment on November 3, 1977, a "10 percent" test. Under this test, if the amount the owner would have had to pay to cancel construction agreements as of the date in question would have totalled more than 10 percent of the total project cost, the loss would be deemed "substantial."

Several comments were received, particularly from industry, on the "10 percent" test. Many of the commentators thought that the 10 percent rule was arbitrary since they regarded even smaller percentage losses on a $100,000,000 project as clearly being substantial. In response to these comments, EPA has abandoned the proposed 10 percent test as a firm rule. However, in order to help minimize administrative burdens and to provide some certainty, the Administrator will consider a loss as being substantial if it would be more than 10 percent of the total project cost. Whether a loss equal to or less than 10 percent is substantial will be determined on a case-by-case basis. The dominant consideration will be whether the "source has so committed itself, financially and otherwise, to the use of a particular site for a particular facility that relocation is not an option and delay or substantial modification would be severely disruptive." Id. at 32.

For a phased construction project for which a permit has been given for a number of phases (additional guidance below), EPA will apply the 10 percent guide to each phase of the project. Thus, if the loss for a phase would exceed 10 percent of the total cost of the phase, then EPA will treat the substantial loss criterion as having been met for that phase.

I. PHASED CONSTRUCTION PROJECTS

Multifacility sources approved for construction in distinct phases require special guidance. In general, if the phases of the major facilities involved are mutually dependent * and one of the major facilities has, by an applicable grandfather date, commenced construction, then all other dependent facilities specifically approved for construction at the same time will also hold such status. Conversely, each independent facility must individually commence construction by the prescribed grandfather date(s). For example, if a power company commenced construction on the first boiler of a three-boiler project in 1977 and plans to commence construction on the second in 1980, and on the third in 1982, the fact that there may be a phased construction process at the same general site does not mean that the boilers to be constructed in 1980 and 1982 can escape the new PSD requirements promulgated today.

The Administrator is concerned about the issuance of permits for phased construction projects that would have the effect of "reserving" the increment for a single source, thereby limiting growth options in the area. The options are to not issue phased construction permits at all or to limit the conditions under which a phased construction may reserve an increment well into the future. The Administrator intends to implement the latter option when plans for a phased project are certain and well-defined. One mechanism to be used is to reassess the BACT determination for the later phases of the project prior to construction to ensure that the most up-to-date control technology will be used. The Administrator will specify at the time that the original permit is issued which BACT determinations will be reassessed. The Administrator may also adopt regulations in the future to deal with this issue more comprehensively.

Also, for phased construction projects, the Administrator does not generally intend to limit the time for construction of the project. However, the first phase must be commenced within 18 months after permit approval, and each construction phase thereafter must commence within 18 months of the date approved in the permit and must not have breaks exceeding 18 months. The Administrator will further evaluate the 18 month criteria as it applies to breaks in construction to determine if a shorter time period (e.g., 6 months) should be used.

J. MISCELLANEOUS SOURCE APPLICABILITY QUESTIONS

EPA also sought comments as to the applicability of PSD to proposed sources below the stated size cutoffs present on the list of 28 source types. The Administrator specifically asked in the December 8, 1977 supplement to the November 3 proposal if fossil-fuel fired steam electric plants rated at or below 250 million British thermal units per hour heat input, municipal incinerators charging not more than 250 tons per day of refuse, fossil-fuel boilers rated at or below 250 million British thermal units per hour heat input, and petroleum storage and transfer units with a capacity of 300,000 barrels or less should be subject to PSD review under the general 250 tons per year potential emission applicability criterion.

EPA has decided that the 250 tons per year criterion should apply even though a source may be below a stated size cutoff. For example, a modification that increases capacity by more than 300,000 barrels for a petroleum storage unit would be subject to review if it has 100 tons per year potential emissions. Also, if a modification increases capacity by only 290,000 barrels but would have more than 250 tons per year potential emissions, then it, too must be reviewed. It should also be noted that the capacity size cutoff like the increased potential emission criteria for defining major modification is cumulative in nature. This approach prevents the "sized" sources from avoiding PSD review merely by limiting an increase to just below the size cutoff. It also ensures that all sources with potential emissions of 250 tons per year or more are treated equally.

In the November 3, 1977 proposal, EPA proposed not to treat a voluntary switch to an alternative fuel or raw material as a modification, if, prior to January 6, 1975, the source were capable of accommodating such fuel or material. Environmentalists opposed this treatment of voluntary fuel switches on the ground that Congress intended all such switches to be treated as modifications. EPA disagrees with this contention. Section 169(2)(C) of the Act by its reference to Section 111(a) in effect adopts the definition of "modification" under Section 111(a) for the purposes of PSD. In adding Section 169(2)(C) to the Act, Congress indicated that it intended to conform the meaning of "modification" to "usage in other parts of the Act." 123 Cong. Rec. H11955, 11957 (November 1, 1977). At the time, regulations promulgated under Section 111 had defined "modifications" to exclude voluntary fuel switches when the source, "prior to the date any standard under this part becomes applicable to that source type * * * [,] was designed to accommodate that alternative use." 40 CFR 60.14(e)(4) (1977). Apparently, Congress intended voluntary fuel switches to be treated similarly for PSD purposes. The PSD regulations first became applicable on January 6, 1975. Consequently, it would appear

*The dependence of facilities within a source will be determined on an individual basis. Two or more facilities will generally be considered dependent if the construction of one would necessitate the construction of the other facility(ies) at the same site in order to complete a given project or provide a given type (not level of) service. A kraft pulp mill is an example of a source with dependent facilities, whereas a three-boiler power plant is a typical example of a source with major independent facilities.

that Congress did not intend voluntary fuel switches to be treated as modifications for PSD purposes, if the source could have accommodated the fuel prior to January 6, 1975. In any event, the proposed treatment of voluntary fuel switches has been an integral part of the PSD regulations since their original promulgation in 1974. *See* 39 FR 42510 (December 5, 1974) § 52.01(d)(2)(iii)).

Since the proposed treatment of voluntary switches is consistent with Congressional intent and since that treatment was already a part of the pre-existing regulations, EPA has retained it in the revisions promulgated today. It should be noted, however, that although such switches will not be subject to PSD review, they will consume increment.

EPA also asked on November 3 whether it should treat a conversion to an alternative fuel by reason of an order under the Energy Supply and Environmental Coordination Act of 1974 or a natural gas curtailment plan pursuant to the Federal Power Act as a modification or not. Shortly thereafter, Congress answered this question. On November 16, it enacted technical and conforming amendments to the 1977 Amendments. Among those amendments was Section 169(2)(C). It in effect defined a modification as not including such conversions. *See* Clean Air Act Sections 111(a)(8) and 169(2)(C) (the latter added by Pub. L. 95-190, Sections 14(a)(54), 91 Stat. 1393, 1402 (November 16, 1977)).

In order to conform the final regulation to the Act and avoid confusion, EPA has further qualified the definition of "major modification" by adding the provision that a switch to an alternative fuel by reason of an order or rule under Section 125 of the Act is not a modification. *See* Clean Air Act Section 125(e).

BEST AVAILABLE CONTROL TECHNOLOGY

The November 3, 1977 proposal solicited comment on the use of a de minimis level of 100 tons per year potential emissions for each pollutant for triggering the BACT requirement. The Agency stated the issue:

> For example, if a source is subject to PSD review either because it is one of the named sources or because it has potential emissions of 250 tons per year of a given pollutant, BACT would be required only for those pollutants whose potential emissions exceed 100 tons per year.

Comments received indicated that if a source were subject to PSD on the basis of the 250 tons per year criterion, then the BACT de minimis level should be made consistent for such sources (i.e., BACT would be required only for those pollutants for which the potential emissions exceed 250 tons per year). The Administrator agrees with this argument and appropriate changes are made in the regulations set forth below.[1]

Some questions have been raised regarding what "subject to regulation under this Act" means relative to BACT determinations. The Administrator believes that the proposed interpretation published on November 3, 1977, is correct and is today being made final. As mentioned in the proposal, "subject to regulation under the Act" means any pollutant regulated in Subchapter C of Title 40 of the Code of Federal Regulations for any source type. This then includes all criteria pollutants subject to NAAQS review, pollutants regulated under the Standards of Performance for new Stationary Sources (NSPS), pollutants regulated under the National Emission Standards for Hazardous Air Pollutants (NESHAP), and all pollutants regulated under Title II of the Act regarding emission standards for mobile sources.

BACT determinations are to be made on a case-by-case basis by the reviewing authority, taking into account several factors, including cost, energy, and technical feasibility. Efforts are now underway within EPA to assist States (and EPA itself in the interim) in making BACT determinations when they assume responsibility for implementing the PSD program. The Agency is preparing and will distribute a guidance document to assist reviewing authorities in implementing the BACT requirement. In addition, the Agency, in response to numerous comments, will establish a national clearinghouse for distributing BACT determinations. The Administrator intends that such a clearinghouse will serve to advise reviewing authorities of each other's determinations and thereby promote a consistent basis of experience. The clearinghouse is not, however, intended to substitute for a case-by-case analysis on the part of the reviewing authority to assess what control technology is required under BACT for the specific source undergoing review.

Other questions have arisen concerning the possibility for requiring control technology transfer for installing control technology to meet the BACT requirement. In general, the BACT requirement does not preclude consideration of technology used in other types of sources but not yet demonstrated for the specific source type undergoing review. However, due consideration of the other factors (economic costs, energy, etc.) must also be given before requiring such technology transfer in order to comply with the BACT requirement.

[1] It should be remembered that a 50-ton source is exempt from BACT review only as to the pollutant for which it is such a source.

In addition, some questions, predominantly from the industrial sector, were raised during the public comment period concerning EPA's ability to impose a design, equipment, work practice, or operational standard under the review for BACT. The Administrator continues to believe that using such a standard is well within the intent of Congress. Under Section 111 (Standards of Performance for New Stationary sources (NSPS)) such a standard, or a combination of such standards, can be promulgated by the Administrator if in his judgment such a standard is achievable and a conventional standard of performance is not feasible. Since an applicable NSPS forms the minimum BACT requirement, it follows that the Administrator should be able to prescribe a design, equipment, work practice, or operational standard for BACT. In addition, EPA's Interpretative Ruling of December 21, 1976 (41 FR 55524) to Section 110 governing new source review in nonattainment situations includes an opportunity for the Administrator to prescribe such a standard where emission limits are not feasible. The Administrator should also have this ability under PSD. It should be emphasized that the Administrator will prescribe a design, equipment, work practice, or operational standard only when technological or economic limitations on the application of measurement methodology to a particular class of sources would make the imposition of an emission standard infeasible.

Finally, it has come to the Administrator's attention that it may be appropriate to make the innovative technology waiver for NSPS under Section 111(j) of the Act applicable to BACT determinations under the PSD program. Briefly, Section 111(j) allows additional time for a source to comply with an applicable NSPS if: (1) The source plans to use innovative technology which has a substantial likelihood of meeting the NSPS at lower cost in terms of energy, economic, or non-air quality environmental impacts; and (2) the source would not cause an unreasonable risk to public health or welfare in its operation or malfunction. The addition of similar provisions to the PSD regulations would seem consistent with Congressional intent under NSPS and perhaps necessary to avoid the BACT determinations from negating the provisions of Section 111(j). Comments are solicited on this issue.

GEOGRAPHIC APPLICABILITY

The regulations made final today require any major source that affects air quality in areas with air quality cleaner than NAAQS (both internal and external to areas designated as nonattainment under Section 107) to meet

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the applicable preconstruction requirements of Section 165. In this respect, the Section 107 designations are not binding on source obligations. This reflects a continuation of EPA's policy of reviewing sources in nonattainment areas to prevent the transport of any emissions which would cause significant deterioration in an affected clean area. Conversely, any source which can make a specific demonstration, subject to public comment and opportunity for public hearing, that no impact will occur in a clean area (whether the area in question is designated as attainment or nonattainment) is exempt from PSD preconstruction review for the applicable pollutant.

Due to several comments received regarding the applicability of the PSD review in rural areas impacted by dust consisting of native soil, the Administrator wishes to reaffirm Agency policy that PSD preconstruction review generally applies to these areas. In general, a new major source to be located in a rural area with infrequent short-term violations of the total suspended particulate matter NAAQS should be allowed to construct after applying the required controls provided that the dust in question is uncontaminated by pollutants from industrial activity and the emissions of the source in conjunction with emissions from other sources in the vicinity (excluding such dust) would not cause a violation of the applicable increment(s) or the applicable NAAQS, assuming as to the NAAQS an appropriate "non-urban" background concentration.[6]

MODELING

In the regulations published today, EPA's assessment of the air quality impacts of new major sources and modifications will be based on EPA's "Guideline on Air Quality Models," OAQPS 1.2-080, U.S. Environmental Protection Agency, Research Triangle Park, N.C. 27711, April, 1978. This guideline is incorporated by reference into the regulations. Sources may request approval from the Administrator to use air quality dispersion models other than those noted in the "Guideline." If the Administrator determines that the model recommended in the "Guideline" and the model proposed by a source are comparable, the proposed model may be used. Methods outlined in EPA's "Workbook for the Comparison of Air Quality Models," U.S. EPA, Research Triangle Park, N.C. 27711, November 1977, may be used to determine comparability of models.

[6]Guideline on Air Quality Models, OAQPS 1.2-080, U.S. Environmental Protection Agency, Research Triangle Park, N.C. 27711, 1978.

The comments on the "Guideline" received in connection with the November 3 proposal and the Modeling Conference addressed three basic policy issues regarding implementation of the modeling guidelines. The first is whether a preliminary screening technique should be used to determine if full scale modeling would be necessary for preconstruction review. The second is whether the modeled estimate of source impact should be limited to a certain distance or a minimum numerical impact or both. Finally, the need to create an arbitration board to resolve modeling disputes was raised.

Industry and State agency comments on the first issue favored the use of some type of screening technique to alleviate resource burdens, i.e., the costs and time involved in sophisticated computer modeling of ambient air impacts. For screening purposes, conservative estimates of emission characteristics and ambient impacts would be modeled using relatively straightforward mathematical formula. However, industry comments stated that the specific screening techniques proposed on November 3, 1977, would be of little real value because of what they considered undue conservatism in the techniques. Environmental groups, however, felt screening techniques would improperly allow deterioration beyond increment allowances.

EPA intends to retain the screening procedures set forth in "Guidelines for Air Quality Maintenance Planning and Analysis, Vol. 10 (Revised), Procedures for Evaluating Air Quality Impact of New Stationary Sources," (October 1977, U.S. EPA, Office of Air Quality Planning and Standards, Research Triangle Park, N.C. 27711). The purpose of such procedures is to reduce resource burdens where there is little or no threat to the PSD increments or NAAQS. However, as the threat to the increment increases, more sophisticated techniques would be used. If these procedures indicate that the ambient concentration increase would exceed one-half of the remaining ambient increment or ceiling allowance, then refined analytical techniques would be used. Thus, as the available increment becomes smaller, sources that can be quickly estimated as impacting less than half the remaining increment will necessarily be those with smaller and smaller impacts.

As a result of comments received on the second policy issue, the Administrator intends to limit generally the application of air quality models to a downwind distance of no more than 50 kilometers. This is because dispersion parameters commonly in use are based on experiments relatively close to sources, and extending these parameters to long downwind distances results in great uncertainty as to the accuracy of the model estimates at such distances. Also, since the air quality impact of many sources falls off rapidly to insignificant levels, EPA does not intend to analyze the impact of a source beyond the point where the concentrations from the source below certain levels (which are generally based on the Class I increments). These levels shown below are therefore interpreted by the Administrator as representing the minimum amount of ambient impact that is significant.

Significant Impact

Pollutant	Annual	Averaging time: 24-Hour	8-Hour	3-Hour	1-Hour
SO_2	1 ug/m³	5 ug/m³		25 ug/m³	
TSP	1 ug/m³	5 ug/m³			
NO_2	1 ug/m³				
CO			0.5 mg/m³		2 mg/m³

However, since the 1977 Amendments provide special concern for Class I areas, any reasonably expected impacts for these areas must be considered irrespective of the 50 kilometer limitation or the above significance levels.

Comments were also received urging the creation of an arbitration board to resolve disputes in situations where refined assessment techniques are not readily available and where significant professional judgment must be made on a case-by-case basis, such as those involving fugitive dust and complex terrain problems, and long range transport. The Agency feels that such an approach would serve to unduly delay the decision making process. The Agency realizes that special concern will have to be addressed to these situations and that EPA Regional Office consistency will have to be assured. EPA intends to use the requirements under section 301(a)(2) of the Act as the mechanism for ensuring Regional consistency. Additionally, the Agency intends to establish an external advisory group to review periodically the modeling guidance and re-

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ommend proposed changes as necessary.

Many other comments of a technical nature were made regarding the Agency's modeling guidance. In many cases, solutions to the issues raised must rely on further scientific development. Some inherently must rely on case-by-case technical judgments by qualified scientists. EPA is actively working in the areas of model validation and improvement, turbulence characterization and the use of representative meteorological data and will provide additional guidance on these areas as it becomes available. Any proposed revisions to the currently issued "Guideline on Air Quality Models" will be subjected to review by the scientific community and interested and affected parties. Procedural mechanisms for effecting a thorough review are currently being investigated. It is anticipated that the "Guideline on Air Quality Models" will be reviewed and updated every 18-24 months. Notice of any proposed revisions will at a minimum be published in the FEDERAL REGISTER for review and comment prior to final issuance.

MONITORING REQUIREMENTS

Another issue frequently raised in the comments was that of the proposed monitoring requirements. Through sections 165 (a)(2) and (e) of the Act, Congress imposed on the owner or operator of a proposed major source who submits an application after August 7, 1978, the task of gathering and analyzing air quality monitoring data for inclusion in the application. Such data must be related to and gathered over the year preceding submittal of the complete application. In addition, through section 165(a)(7), the owner or operator may be required to conduct such post-construction monitoring as may be necessary to determine the effect the source or modification may have or is having on air quality in any area it might affect. It is apparent that Congress included the monitoring requirements as a means of checking the accuracy of the modeling results. However, in many cases, monitoring data may not provide an adequate "real world" check on the accuracy of modeling as it applies to increment consumption.

As proposed, EPA has decided generally not to require preconstruction or postconstruction ambient monitoring to determine how much of the increment has been used up. First, the year-to-year variability of air quality data limits the usefulness of certain data collected. Next, the increments are generally consumed by new or modified sources on the basis of allowable emissions, whereas ambient monitoring will measure air quality as it is affected by changes in actual emissions. Moreover, several emission changes that would be detected by an ambient monitor may not consume increment. That is because certain emissions which do or will affect air quality levels do not count against the increments (e.g., emissions from any source commencing construction prior to January 6, 1975, but completed at some later date; emissions resulting from compliance with an order under section 125). In addition, the State may exempt certain emission changes which otherwise would consume a portion of the available PSD increment (e.g., Federally-ordered fuel switches, temporary emissions, and new sources outside the United States). Finally, the stack height provisions of section 123 of the Act require in any case where a source uses a stack the height of which exceeds good engineering practice that dispersion modeling efforts assume a good engineering practice stack height. In actual practice, assessment of the available increment will normally be accomplished through an accounting procedure whereby atmospheric modeling of individual sources will be used to keep track of changes in actual and allowable emissions as appropriate.

Although increment consumption must of necessity be tracked through modeling, EPA does not intend that there be no "real world" checks on the accuracy of modeling. If an applicant or other party believes that a model used by EPA has either overpredicted or underpredicted the air quality impact of a source, EPA welcomes the submission of data which will more precisely define the impact of the source. For isolated sources, air quality monitoring may be sufficient for this purpose. However, model validation using air quality monitoring is generally expensive, since a complex monitoring network is usually required to ensure that maximum concentrations are measured. Other model validation methods may be less expensive and more reliable (e.g., tracer studies and wind tunnel experiments), especially where more than one source may contribute to the increment consumption. In any case, where subsequent data demonstrate to EPA's satisfaction that the modeling is in error, EPA will make appropriate adjustments so as to provide more (or less) of the increment for future use.

Since PSD review now includes a review against the applicable NAAQS, EPA intends to focus the preconstruction and postconstruction monitoring requirements on obtaining the necessary data for this purpose. To that end existing air quality data will be used to the maximum extent practicable and preconstruction monitoring will only be required as necessary. Also, if preliminary modeling or other data indicate that the new source would not pose a threat to a NAAQS, EPA will exempt the source from the preconstruction monitoring requirements altogether. For example, if an SO_2 source plans to construct in an area with no other SO_2 sources, no preconstruction monitoring for SO_2 would be required. On the other hand, because of the long range transport of oxidants, if a major source of volatile organic compounds intends to locate in an attainment or unclassified area for photochemical oxidant, EPA will routinely require that the source submit oxidant monitoring data. Finally, since certain sources with allowable emissions of less than 50 tons per year, 1,000 pounds per day, or 100 pounds per hour, are exempt from an air quality impact analysis, air quality monitoring would not be required for such sources.

All air quality monitoring must adhere to EPA's monitoring procedures in effect at the time of the monitoring. Currently, these requirements include criteria for siting monitors and instrument probes, the specification of reference methods and equivalent methods, and a minimum quality assurance program. EPA will implement the monitoring requirements promulgated in this rulemaking primarily through guidance found in "Ambient Air Monitoring Guidelines for Prevention of Significant Deterioration," OAQPS 1.2-096, U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards, Research Triangle Park, N.C. 27711, May 1978. EPA encourages permit applicants to consult with the reviewing authority regarding the need for and implementation of the monitoring requirements.

The number of monitors will be based on a case-by-case determination considering source emission characteristics, terrain and meteorology. In some cases, one instrument per pollutant may be adequate. The source will be permitted to use existing data where appropriate. Judgments on the representativeness of existing data taken near the source must be made on a case-by-case basis.

Twenty-four hour samples for SO_2 (bubbler method) will not be acceptable, since 3-hour values would not be available for comparison with the 3-hour secondary NAAQS standard and increment. Also, if bubblers were to be used, detailed quality assurance requirements would be required because of known temperature instability problems with the bubbler methods. In most situations, the cost of running a bubbler may not be significantly different from a continuous analyzer due to the more rigid quality assurance procedures and the need for laboratory support.

Existing 24-hour particulate samples on 6-day intervals will generally be acceptable. In many areas, such data have been collected for a period of

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years. As to such areas, additional monitoring will generally be unnecessary. However, the Administrator may require sample collection more often than every sixth day.

BASELINE CONCENTRATION

The term "baseline concentration" is used in an abstract sense to establish the starting point for defining significant deterioration. This term is applicable for only sources of SO_2 and PM. Changes in the emission levels of these pollutants from sources contributing to the baseline concentration will in turn affect the amount of air quality increment that remains available to accommodate additional growth.

On November 3, 1977, EPA proposed a definition of baseline concentration that reflected a January 6, 1975, starting date for most sources. Additionally, this proposal contained specific guidance on how a baseline concentration might be established in a given area. Due to several implementation and legal concerns raised during the public comment period, the proposal of November 3 has been amended in three respects. The regulations promulgated today reflect an August 7, 1977, baseline date, place primary emphasis on tracking emission changes rather than on establishing a baseline concentration, and provide additional guidance as to what emission levels contribute to the baseline concentration.

Section 169(4) of the Act generally defines baseline in terms of the ambient concentration existing at the time of the first application for a permit in an area. However, major construction commencing after January 6, 1975, is specifically acknowledged to consume increment and cannot be considered as contributing to the baseline concentration. Both the November 3 proposal and the regulations promulgated today recognize the severe technical and administrative problems with implementing a definition of baseline concentration that relates to the date of first permit application in an area. The administrator believes that a strict interpretation of the Act's language would create thousands of different areas each with different baseline starting points. Moreover, these areas would eventually overlap as more and more sources applied for PSD permits. The final regulations and those proposed on November 3, 1977, resolve those problems by establishing a uniform starting date for defining the baseline concentration in all areas. The November 3 proposal, however, differs with the final regulations as to what the starting date should be.

The Administrator believes that an August 7, 1977, baseline date rather than one of January 6, 1975, better fulfills the requirements of the Act and is the earliest possible time that could be used as a uniform starting date. This date coincides with the time that PSD review under some of the new Act provisions could have taken place and with the time that States were given affirmative responsibility to protect the applicable PSD increments in their plans. As required by the Act, major source construction commencing after January 6, 1975, is not included in the baseline. Such activities consume increments as discussed below.

The November 3, 1977, proposal also contained guidance for establishing a baseline concentration through the use of existing air quality data. That proposal also suggested an alternative means to construct a baseline concentration using air quality dispersion modeling when appropriate air quality data did not exist. The regulations promulgated today no longer suggest that the baseline concentration be formally established. The Administrator feels that increment consumption can be best tracked by tallying changes in the emission levels of sources contributing to the baseline concentration and increases in emissions due to new sources. Data to establish baseline air quality in an absolute sense would be needed only if increment consumption were to be tracked using ambient measurements. Thus, to implement the air quality increment approach set forth in the Act, the reviewing authority needs to verify that all changes from baseline emission rates (decreases or increases as appropriate) in conjunction with the increased emissions associated with approved new source construction will not violate an applicable increment or NAAQS. However, before this concept can be carried out, some additional guidance must be given regarding the type of emission changes that must be tracked.

EPA generally intends to use an actual emissions concept in implementing the above baseline approach. The concept of an actual emissions baseline has been used in implementing EPA's previous PSD regulations, and the Administrator believes that the Act intends for this concept to be continued. Section 169(4) defines baseline concentration in terms of existing air quality. In carrying out an actual emissions baseline, EPA will use reasonable assumptions for various factors affecting the level of source operation. 1977 values will generally be used for hours of operation, capacity utilization, and the types of materials combusted, processed and/or stored, unless another previous year would be more representative or such use would not be allowed under established permit conditions. Actual emissions also includes into the baseline any future increases in hours of operation or capacity utilization as they occur if such are allowed to the source as of August 7, 1977, and if the source could have been reasonably expected make these increases on this date. This policy is consistent with the intent of the Act to base increment consumption on all emission increases from new and modified sources, but to allow consumption of the increment to occur from only certain non-modification activities (e.g., some fuel-switches) of existing sources. Thus, with the exceptions mentioned below, the Administrator will implement an actual emissions baseline in the regulations promulgated today.

An actual emissions baseline would be inappropriate to address situations where a SIP relaxation had been submitted to EPA, and was still pending, on August 7, 1977. Application of an actual emissions baseline would penalize those States that required sources which the SIP relaxation would affect to comply with the allowable rates under the existing SIP while EPA was in the process of reviewing the proposed SIP revision. Such States should not be forced to lose substantial portions of the applicable increments when other States allowed their sources to emit at the relaxed SIP level in advance of formal EPA approval. Therefore, the regulations promulgated today require that contributions to the baseline concentration from existing sources affected by a SIP relaxation pending as of August 7 1977, would be based on the allowable emissions under the SIP as revised.

In addition, the actual emissions concept does not apply to those sources on which construction commenced before January 6, 1975, but which were not in operation by August 7, 1977. In such cases, the allowable emissions as defined in the construction approval will be used to define the contribution of those sources to baseline.

INCREMENT CONSUMPTION

The comments raised a number of specific issues related to the consumption of PSD increments. The Administrator wishes to clarify first that increment consumption occurs in general as a result of new major stationary sources and major modifications commencing construction after January 6, 1975. The degree of such consumption is in general determined on the basis of approved allowable emissions. This procedure is consistent with the Act language of Part C to restrict increases in ambient concentration above baseline levels less than certain specified increments. Increases in the baseline emissions of sources contributing to the baseline concentration will also consume increment (see discussion on baseline concentration). Conversely, reductions in the baseline emissions of sources existing in 1977 generally expand the available PSD

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increment(s). As indicated above, the degree of increment expansion that is creditable will generally be determined through air quality dispersion modeling of the source's emission clean-up beyond its 1977 actual emissions level. For a new source permitted under PSD before August 7, 1977, any renegotiated emission limits more restrictive than those previously permitted will count toward expanding the PSD increment available for other new source construction. States are free to choose the mechanisms for allocating the allowable increment to sources, including reversing any expansion of the increment achieved by control of existing sources for those sources which have installed additional controls.

In addition, offsets (i.e., additional control of existing sources) may be permitted in order to allow the construction of a new source in an area where the increment would not otherwise permit the construction of the source. Such offsets have always been acceptable under the Agency's PSD regulations, and the regulations promulgated below do not change this policy. To be acceptable, such reductions must be expressed in terms of actual emissions when the offsetting source has its emissions included in the baseline. An exception to this would be a major source commencing construction prior to January 6, 1975, but not yet operating by August 7, 77. For such sources and for situations involving reductions from major construction projects commencing construction after January 6, 1975, offsets are to be transacted on the basis of allowable emissions.

In an area where the PSD increments are known to be exceeded, then the plan must be revised to correct any such violation. Applicable SIP revisions may include the use of economic incentives such as emission charges or the development of offset markets. In such areas major construction cannot continue to be approved unless all increment violations significantly impacted by the proposed emission increase are corrected prior to operation of the proposed source. Accordingly, if acceptable offsets are secured by the proposed source, then such source can be approved for construction. Alternatively, the SIP can be revised by the State to restore an increment and thus accommodate the new construction. Where a proposed major construction project would cause a new violation of the applicable increment, offsetting reductions must be obtained that are sufficient to avoid causing the violation.

The Administrator intends that any increment analysis as appropriate include the effects of growth and reduction in emissions of other sources in the area affected by the proposed source occurring since the date of the effective baseline. Sources will be generally required to obtain such information, but the information will be available from the State air pollution control agency.

Questions have also arisen regarding how SIP relaxations are to be taken into account in terms of consuming available PSD increments. As stated above, increments are consumed as allowable emissions are increased, and this is true whether those increases are a result of new source growth or SIP relaxations. The regulations promulgated elsewhere in today's FEDERAL REGISTER require that any SIP relaxation that would affect a PSD area must include a determination that the applicable increment will not be exceeded. Whether a plan relaxation would consume the available increment would be typically determined through modeling the difference between the allowable emissions resulting from the new relaxed SIP limit and the emissions of the applicable source(s) which were included in the baseline.

SIP relaxations received by EPA after August 7, 1977, but before today's FEDERAL REGISTER do consume increment. However, EPA believes that such revisions require special consideration due to the uncertainty of how the new Act would apply to such SIP relaxations. To review these proposed revisions as to the degree of anticipated increment consumption without advance notice would have caused considerable delay and economic disruption. Therefore, the Administrator feels that these SIP relaxations need not be individually assessed to determine the precise amount of consumed increment before such relaxations may be approved. The periodic assessment requirement to verify that the applicable increments have not been exceeded is thought to be sufficient protection. This assessment would result in revisions to the SIP if an increment were found to have been violated. All SIP relaxations received after today will be individually reviewed against the available PSD increments. If deterioration beyond that allowed under the available increments would occur under a SIP relaxation, then such a SIP revision would be disapproved to the extent that it would cause significant deterioration.

The Administrator is concerned that while States are developing their own PSD regulations and EPA is implementing the PSD program, EPA should not make decisions which would have a significant impact upon future growth options of the States. In the interim, EPA generally will allocate use of the increments on a first-come, first-served basis as has been done under the previous PSD regulations. The Administrator recognizes that this approach may not be adequate on a long-term basis to achieve the purposes of the Act. Other options are available and should be pursued by the States in the development of their plans for PSD. Under 40 CFR 51.24, published today, States are required to develop a program for increment allocation and a number of program options are suggested for their consideration. EPA will be assessing the merits and feasibility of several allocation options (including first-come, first-served) and thereafter issue guidance for the submission of revised State implementation plans. This evaluation will consider alternatives in which carefully designed economic incentives serve as an adjunct to or a replacement for an administrative permitting procedure. The economic incentive programs to be considered include marketable permits, emission fees, and emissions density zoning.

While EPA is administering the PSD permit program, the Administrator will solicit and give careful consideration during the permit process to the views of State and local officials regarding the impact of proposed permit decisions on an area's potential for economic development. Additionally, where a source is expected to consume the entire remaining increment, the Administrator will notify the Governor of this proposed action.

In response to comments from the Department of Energy, EPA while implementing the PSD program will exclude, if so requested by a Governor, certain concentrations in calculating increment usage as provided in section 163(c) of the Act. These concentrations include ambient impacts from federally ordered fuel switches, fuel switches caused by gas curtailment plans, temporary emissions and new sources outside the United States. The Administrator will assume that all fuel conversion operations consume portions of the available increment unless otherwise requested by the Governor.

The Governor's ability to effect exclusions under section 163(c) will not automatically extend beyond nine months from today. No exclusion beyond this time will occur unless the Governor has submitted a plan which meets all requirements of 40 CFR 51.24 (published elsewhere in today's FEDERAL REGISTER). The Administrator would also like to point out that exclusions under section 163(c) are not always of a permanent nature. Exclusions from increment consumption for stationary sources affected by a natural gas curtailment plan or by orders under the Energy Supply and Environmental Coordination Act of 1974 may occur no later than 5 years after the effective date of the applicable plan or order. A Governor should realize that full use of such exclusions may lead to plan revisions in the future in order to

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preserve the PSD increment. The exclusions will allow more sources to be approved than could be otherwise in the interim. Consequently, when the exclusions expire, the excluded concentrations may well cause exceedences.

To allow the Governor to make use of section 163(c) prior to plan approval reflects a change from the Agency's preliminary position. In the November 3, 1977, proposal, the Agency stated that the Act does not appear to make such exclusions available as to a particular State until EPA has approved a PSD SIP revision for that State. Behind that position was the Agency's perception that Congress had conditioned the availability of the exclusions on approval of such revisions in order to give the States added incentive for submitting them. The Agency still believes that that was Congress' purpose. It has concluded, however, that making the exclusions unavailable nine months from today to States which have failed to submit an approvable PSD revision will serve that purpose as well as making them available at that time only to States which have submitted such a revision. A State will have as much reason to submit a plan revision under the present rule as it would have had under the old. In addition, making the exclusions available now will give the States more flexibility than they would have had for permitting growth.

Another issue related to increment consumption and EPA involvement concerns the review of major construction that would impact interstate areas. The Administrator is pursuing various mechanisms to allocate the amount of increment consumption to such sources when affected States are in disagreement. If an interstate dispute arises before more definitive guidance can be prepared, the Administrator intends to restrict increment consumption to equal amounts at the State line. In other words, when two States are involved in an interstate dispute over increment consumption, no source or series of sources in either State can be approved for construction if they would consume over one-half of the total applicable increment at the State line. Applicable increment here refers to that increment applying in the State where such construction would occur.

Federal Lands

A number of comments suggested that EPA prepare and publish guidance on determining the impacts a source may have on "air quality related values." Such general guidance is not currently available and, until such time as it is, determinations should be made on a case-by-case basis. Sources which may impact Federal Class I areas should consult with the EPA Regional Offices on questions concerning the possibility of adverse impacts on air quality values and the type of analysis that must be included with the permit application.

Environmental groups pointed out that the proposed regulations did not specifically require Federal Land Managers to protect "affirmatively" air quality related values in Federal Class I areas. Federal Land Managers do have such a responsibility, and the regulations now say so explicitly. It was also suggested that a Federal Land Manager is obligated to withhold any other permits for which he or she is the issuing authority or over which he or she may have control, if EPA did not concur with the Federal Land Manager's determination that air quality related values would be adversely impacted. Part C of the Act and therefore the regulations promulgated today do not require this, but neither do they prohibit a Federal Land Manager from withholding a permit.

Section 165(d)(2)(C)(ii) of the Act would bar the issuance of a PSD permit "[i] in any case where the Federal Land Manager (of lands in a Class I area) demonstrates to the satisfaction of the State" that the proposed source or modification would adversely impact the air quality related values of such lands. Section 165(d)(2)(C)(iii), on the other hand, would allow the "State" to issue a permit if the Federal Land Manager were to certify that the source or modification would not adversely impact such values, even though it would cause or contribute to a violation of the applicable Class I increments. Both sections presuppose that the "State" would be the permitting authority. The final regulations published today contain provisions (§ 52.21(q) (3) and (4)) which for the most part parallel Sections 165(d)(2)(C) (ii) and (iii). The regulations, however, treat the "Administrator" as the permitting authority, not the "State". This is appropriate. Congress must have recognized that there would be instances in which EPA, and not a State, would be the permitting authority. Furthermore, Congress would have expected, in such instances, that the safeguard of Section 165(d)(2)(C)(ii) and the variance of Section 165(d)(2)(C)(iii) would be available.

National Ambient Air Quality Standards

Under the regulations published today, no PSD permit for a source whose increased allowable emissions are equal to or greater than 50 tons per year, 1,000 pounds per day, or 100 pounds per hour may be granted without assurance that emissions from the source will not cause or contribute to a violation of a NAAQS. If an initial determination shows that such a source may interfere with an applicable ambient standard, the owner or operator must reduce emissions or secure appropriate emission offsets from other nearby sources. While EPA is implementing the PSD program, it does not intend to be involved directly in approving emission offsets for a proposed source except where EPA is also implementing a State new source review program. Thus, the owner or operator would first have to obtain offsets through the State agency new source review program before EPA could approve the source under PSD. An EPA permit cannot be issued until the State permit is granted. Sources are encouraged to seek concurrent review from the State when applying for a PSD permit to minimize review delays. Such action will assist the source to commence construction on schedule as required under the PSD permit.

Other Issues

A number of other important concerns were raised by comments, including undue review delays, the effects of pending reclassifications on preconstruction reviews, guidance on other impact analyses, the definition of source and the high costs of required newspaper advertisements.

Several comments raised the concern that PSD review might be unduly long, especially for those sources which would have only minimal air quality impacts. The Administrator will take steps to expeditiously evaluate permit applications and will inform applicants as to the completeness of their submittals within 30 days or less of receiving the application. In addition, the exemption for 50-ton sources discussed above will greatly reduce the permit delays that were possible under the proposed regulation. The Administrator expects that such sources will satisfy most, if not all, their PSD requirements by going through the State new source review programs. Although such a source must still obtain a PSD permit the Administrator does not intend generally to duplicate the analyses and determinations made during the State new source review. In reviewing a 50-ton source, every effort will be made to complete the required analyses within 30 days after receiving a complete application and the public participation process to the extent necessary within 45 days thereafter. If a public comment period is necessary, it will run for 30 days from the first day of the 45-day period. On that day EPA will give due notice of the Agency's determinations and tentative decision. At this time, EPA will also solicit comment on the need to conduct a public hearing, if one is necessary. If no response to the latter is received by day

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15, no public hearing will be held. If no supportable concerns are received during the scheduled 30-day public comment period (or the public hearing if one is held), the Administrator intends to issue final approval to construct within 15 days after the public comment period has ended. These are current estimates of the maximum time required for PSD review of smaller sources. Every effort will be made to shorten this review time.

In response to comments received, EPA has excluded from the final regulations the proposed provision requiring that final action on a permit be delayed if the source would impact upon an area where a proposed redesignation to a more stringent class was pending. The original intent of this provision was to protect potential class I areas during start-up of the new PSD program. Under the previous PSD regulations, all areas were initially class II. Now Congress has designated several mandatory class I areas. Moreover, States have had considerable opportunity to designate any others. Thus, this provision is no longer necessary. States may establish such a requirement as part of their own implementation plans.

The analysis related to a source's impact on soils, vegation, and visibility should focus primarily on such impacts in class I areas, since final approval may turn on the effects of the source on air quality related values in class I areas. Where there would be no class I impacts, impacts elsewhere may affect the BACT determination, but would typically not have a significant bearing on the final approval decision. The impact assessment should generally be qualitative in nature and designed to inform the general public of the relative impact of the source on those values. It should be noted, too, that the Administrator intends to base approval or disapproval of a major source regarding its ambient air quality impact on both the direct emissions of that source and those secondary emissions that can be accurately quantified.* All secondary emissions that cannot be accurately estimated during the preconstruction review will consume the applicable increment(s) as they occur.

*Where a new source will result in specific and well defined secondary emissions which can be accurately quantified, the reviewing authority should consider such secondary emissions in determining whether the source would cause or contribute to a violation of an ambient ceiling or increment. However, since EPA's authority to perform or require indirect source review relating to mobile sources regulated under Title II of the Act (motor vehicles and aircraft), has been restricted by statute, consideration of the indirect impacts of motor vehicles and aircraft traffic is not required under this Ruling.

Pursuant to comments on the November 3, 1977, proposal, the Administrator is revising the definition of source to mean any structure, building, facility, equipment, installation, or operation (or combination thereof) which is located on one or more contiguous or adjacent properties and owned or operated by the same person or persons under common control. This precludes a large plant from being separated into individual production lines for purposes of determining applicability of the PSD requirements. This in turn resolves the issue raised in the proposal regarding PSD applicability to a facility which is constructed at the site of, but is different than, a source listed in the 28 categories. Such a facility would be part of the source under the above definition, and thus would be subject to PSD review as a modification to it.

A number of State agencies commented that the cost of "prominent newspaper advertisement" of the opportunity for public comment at a hearing could become prohibitively expensive, especially if the number of PSD reviews under the act increases as expected. Therefore, the regulations have been changed to remove the requirement for "prominent" newspaper advertisement. Nevertheless, whatever notice is given must provide a meaningful opportunity for public comment.

FINAL ACTION.

The following regulatory amendments are nationally applicable, and this action is based upon determinations of nationwide scope and effect. Therefore, under section 307(b)(1) of the act, judicial review may be sought only in the United States Court of Appeals for the District of Columbia. Petitions for judicial review must be filed on or before August 18, 1978.

(Sec. 101(b)(1), 110, 114, 123, 125(e), 160-169, and 301(a) of the Clean Air Act, as amended (42 U.S.C. 7401(b)(1), 7410, 7414, 7423, 7425(e), 7470-7479, 7601(a)).)

Dated June 9, 1978.

DOUGLAS M. COSTLE,
Administrator.

Title 40, Part 52 of the Code of Federal Regulations is amended as follows:

1. Section 52.21 is revised as follows:

§ 52.21 Prevention of significant deterioration of air quality.

(a) *Plan disapproval.* The provisions of this section are applicable to any State implementation plan which has been disapproved with respect to prevention of significant deterioration of air quality in any portion of any State where the existing air quality is better than the national ambient air quality standards. Specific disapprovals are listed where applicable, in subparts B through DDD of this part. The provisions of this section have been incorporated by reference into the applicable implementation plans for various States, as provided in subparts B through DDD of this part. Where this section is so incorporated, the provisions shall also be applicable to all lands owned by the Federal Government and Indian Reservations located in such State. No disapproval with respect to a State's failure to prevent significant deterioration of air quality shall invalidate or otherwise affect the obligations of States, emission sources, or other persons with respect to all portions of plans approved or promulgated under this part.

(b) *Definitions.* For the purposes of this section:

(1) "Major stationary source" means—

(i) Any of the following stationary sources of air pollutants which emit, or have the potential to emit, 100 tons per year or more of any air pollutant regulated under the Clean Air Act (the "Act"): Fossil fuel-fired steam electric plants of more than 250 million British thermal units per hour heat input, coal cleaning plants (with thermal dryers), kraft pulp mills, portland cement plants, primary zinc smelters, iron and steel mill plants, primary aluminum ore reduction plants, primary copper smelters, municipal incinerators capable of charging more than 250 tons of refuse per day, hydrofluoric, sulfuric, and nitric acid plants, petroleum refineries, lime plants, phosphate rock processing plants, coke oven batteries, sulfur recovery plants, carbon black plants (furnace process), primary lead smelters, fuel conversion plants, sintering plants, secondary metal production plants, chemical process plants, fossil fuel boilers (or combinations thereof) totaling more than 250 million British thermal units per hour heat input, petroleum storage and transfer units with a total storage capacity exceeding 300 thousand barrels, taconite ore processing plants, glass fiber processing plants, and charcoal production plants; and

(ii) Notwithstanding the source sizes specified in paragraph (b)(1)(i) of this section, any source which emits, or has the potential to emit, 250 tons per year or more of any pollutant regulated under the Act.

(2) "Major modification" means any physical change in, change in the method of operation of, or addition to a stationary source which increases the potential emission rate of any air pollutant regulated under the act (including any not previously emitted and taking into account all accumulated increases in potential emissions occurring at the source since August 7, 1977, or since the time of the last construction approval issued for the source pursuant to this section, which-

ever time is more recent, regardless of any emission reductions achieved elsewhere in the source) by either 100 tons per year or more for any source category identified in paragraph (b)(1)(i) of this section, or by 250 tons per year or more for any stationary source.

(i) A physical change shall not include routine maintenance, repair and replacement.

(ii) A change in the method of operation, unless previously limited by enforceable permit conditions, shall not include:

(a) An increase in the production rate, if such increase does not exceed the operating design capacity of the source;

(b) An increase in the hours of operation;

(c) Use of an alternative fuel or raw material by reason of an order in effect under Sections 2 (a) and (b) of the Energy Supply and Environmental Coordination Act of 1974 (or any superseding legislation), or by reason of a natural gas curtailment plan in effect pursuant to the Federal Power Act;

(d) Use of an alternative fuel or raw material, if prior to January 6, 1975, the source was capable of accommodating such fuel or material; or

(e) Use of an alternative fuel by reason of an order or rule under Section 125 of the Act;

(f) Change in ownership of the source.

(3) "Potential to emit" means the capability at maximum capacity to emit a pollutant in the absence of air pollution control equipment. "Air pollution control equipment" includes control equipment which is not, aside from air pollution control laws and regulations, vital to production of the normal product of the source or to its normal operation. Annual potential shall be based on the maximum annual rated capacity of the source, unless the source is subject to enforceable permit conditions which limit the annual hours of operation. Enforceable permit conditions on the type or amount of materials combusted or processed may be used in determining the potential emission rate of a source.

(4) "Source" means any structure, building, facility, equipment, installation, or operation (or combination thereof) which is located on one or more contiguous or adjacent properties and which is owned or operated by the same person (or by persons under common control).

(5) "Facility" means an identifiable piece of process equipment. A source is composed of one or more pollutant-emitting facilities.

(6) "Fugitive dust" means particulate matter composed of soil which is uncontaminated by pollutants resulting from industrial activity. Fugitive dust may include emissions from haul roads, wind erosion of exposed soil surfaces and soil storage piles and other activities in which soil is either removed, stored, transported, or redistributed.

(7) "Construction" means fabrication, erection, installation, or modification of a source.

(8) "Commence" as applied to construction of a major stationary source or major modification means that the owner or operator has all necessary preconstruction approvals or permits and either has:

(i) Begun, or caused to begin, a continuous program of physical on-site construction of the source, to be completed within a reasonable time; or

(ii) Entered into binding agreements or contractual obligations, which cannot be cancelled or modified without substantial loss to the owner or operator, to undertake a program of construction of the source to be completed within a reasonable time.

(9) "Necessary preconstruction approvals or permits" means those permits or approvals required under Federal air quality control laws and regulations and those air quality control laws and regulations which are part of the applicable State implementation plan.

(10) "Best available control technology" means an emission limitation (including a visible emission standard) based on the maximum degree of reduction for each pollutant subject to regulation under the act which would be emitted from any proposed major stationary source or major modification which the Administrator, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such source or modification through application of production processes or available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of such pollutant. In no event shall application of best available control technology result in emissions of any pollutant which would exceed the emissions allowed by any applicable standard under 40 CFR part 60 and part 61. If the Administrator determines that technological or economic limitations on the application of measurement methodology to a particular class of sources would make the imposition of an emission standard infeasible, a design, equipment, work practice or operational standard, or combination thereof, may be prescribed instead to require the application of best available control technology. Such standard shall, to the degree possible, set forth the emission reduction achievable by implementation of such design, equipment, work practice or operation, and shall provide for compliance by means which achieve equivalent results.

(11) "Baseline concentration" means that ambient concentration level reflecting actual air quality as of August 7, 1977, minus any contribution from major stationary sources and major modifications on which construction commenced on or after January 6, 1975. The baseline concentration shall include contributions from:

(i) The actual emissions of other sources in existence on August 7, 1977, except that contributions from facilities within such existing sources for which a plan revision proposing less restrictive requirements was submitted on or before August 7, 1977, and was pending action by the Administrator on that date shall be determined from the allowable emissions of such facilities under the plan as revised; and

(ii) The allowable emissions of major stationary sources and major modifications which commenced construction before January 6, 1975, but were not in operation by August 7, 1977.

(12) "Federal Land Manager" means, with respect to any lands in the United States, the Secretary of the department with authority over such lands.

(13) "High terrain" means any area having an elevation 900 feet or more above the base of the stack of a facility.

(14) "Low terrain" means any area other than high terrain.

(15) "Indian Reservation" means any Federally-recognized reservation established by Treaty, Agreement, Executive Order, or Act of Congress.

(16) "Indian Governing Body" means the governing body of any tribe, band, or group of Indians subject to the jurisdiction of the United States and recognized by the United States as possessing power of self-government.

(17) "Reconstruction" will be presumed to have taken place where the fixed capital cost of the new components exceed 50 percent of the fixed capital cost of a comparable entirely new facility or source. However, any final decision as to whether reconstruction has occurred shall be made in accordance with the provisions of 40 CFR 60.15(f)(1)-(3). A reconstructed source will be treated as a new source for purposes of this section, except that use of an alternative fuel or raw material by reason of an order in effect under section 2 (a) and (b) of the Energy Supply and Environmental Coordination Act of 1974 (or any superseding legislation), by reason of a natural gas curtailment plan in effect pursuant to the Federal Power Act, or by reason of an order or rule under section 125 of the act, shall not be considered reconstruction. In determining best available control technology for a reconstructed source, the provisions of

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40 CFR 60.15(f)(4) shall be taken into account in assessing whether a standard of performance under 40 CFR part 60 is applicable to such source.

(18) "Fixed capital cost" means the capital needed to provide all of the depreciable components.

(19) "Allowable emissions" means the emission rate calculated using the maximum rated capacity of the source (unless the source is subject to enforceable permit conditions which limit the operating rate, or hours of operation, or both) and the most stringent of the following:

(i) Applicable standards as set forth in 40 CFR part 60 and part 61,

(ii) The applicable State implementation plan emission limitation, or

(iii) The emission rate specified as a permit condition.

(c) *Ambient air increments.* In areas designated as class I, II or III, increases in pollutant concentration over the baseline concentration shall be limited to the following:

Maximum allowable increase.

[Micrograms per cubic meter]

Pollutant	Class I	Class II	Class III
Particulate matter:			
Annual geometric mean	5	19	37
24-h maximum	10	37	75
Sulfur dioxide:			
Annual arithmetic mean	2	20	40
24-h maxium	5	91	182
3-h maximum	25	512	700

For any period other than an annual period, the applicable maximum allowable increase may be exceeded during one such period per year at any one location.

(d) *Ambient air ceilings.* No concentration of a polutant shall exceed:

(1) The concentration permitted under the national secondary ambient air quality standard, or

(2) The concentration permitted under the national primary ambient air quality standard, whichever concentration is lowest for the pollutant for a period of exposure.

(e) *Restrictions on area classifications.* (1) All of the following areas which were in existence on August 7, 1977, shall be Class I areas and may not be redesignated:

(i) International parks,

(ii) National wilderness areas which exceed 5,000 acres in size,

(iii) National memorial parks which exceed 5,000 acres in size, and

(iv) National parks which exceed 6,000 acres in size.

(2) Areas which were redesignated as Class I under regulations promulgated before August 7, 1977, shall remain Class I, but may be redesignated as provided in this section.

(3) Any other area, unless otherwise specified in the legislation creating such an area, is initially designated Class II, but may be redesignated as provided in this section.

(4) The following areas may be redesignated only as Class I or II:

(i) An area which as of August 7, 1977, exceeded 10,000 acres in size and was a national monument, a national primitive area, a national preserve, a national recreational area, a national wild and scenic river, a national wildlife refuge, a national lakeshore or seashore; and

(ii) A national park or national wilderness area established after August 7, 1977, which exceeds 10,000 acres in size.

(f) *Exclusions from increment consumption.* (1) Upon written request of the Governor, made after notice and opportunity for at least one public hearing to be held in accordance with procedures established in 51.4 of this chapter, the Administrator shall exclude the following concentrations in determining compliance with a maximum allowable increase:

(i) Concentrations attributable to the increase in emissions from sources which have converted from the use of petroleum products, natural gas, or both by reason of an order in effect under Sections 2 (a) and (b) of the Energy Supply and Environmental Coordination Act of 1974 (or any superseding legislation) over the emissions from such sources before the effective date of such order;

(ii) Concentrations attributable to the increase in emissions from sources which have converted from using natural gas by reason of a natural gas curtailment plan in effect pursuant to the Federal Power Act over the emissions from such sources before the effective date of such plan;

(iii) Concentrations of particulate matter attributable to the increase in emissions from construction or other temporary activities; and

(iv) The increase in concentrations attributable to new sources outside the United States over the concentrations attributable to existing sources which are included in the baseline concentration.

(2) No exclusion under paragraph (f)(1) (i) or (ii) of this section shall apply more than five years after the effective date of the order to which paragraph (f)(1)(i) refers or the plan to which paragraph (f)(1)(ii) refers, whichever is applicable. If both such order and plan are applicable, no such exclusion shall apply more than five years after the later of such effective dates.

(3) No exclusion under paragraph (f) of this section shall occur after March 19, 1979, if a State implementation plan revision meeting the requirements of 40 CFR 51.24 has not been submitted to the Administrator by that time.

(g) *Redesignation.* (1) All areas (except as otherwise provided under paragraph (e) of this section) are designated Class II as of December 5, 1974. Redesignation (except as otherwise precluded by paragraph (e) of this section) may be proposed by the respective States or Indian Governing Bodies, as provided below, subject to approval by the Administrator as a revision to the applicable State implementation plan.

(2) The State may submit to the Administrator a proposal to redesignate areas of the State Class I or Class II provided that:

(i) At least one public hearing has been held in accordance with procedures established in § 51.4 of this chapter;

(ii) Other States, Indian Governing Bodies, and Federal Land Managers whose lands may be affected by the proposed redesignation were notified at least 30 days prior to the public hearing;

(iii) A discussion of the reasons for the proposed redesignation, including a satisfactory description and analysis of the health, environmental, economic, social and energy effects of the proposed redesignation, was prepared and made available for public inspection at least 30 days prior to the hearing and the notice announcing the hearing contained appropriate notification of the availability of such discussion;

(iv) Prior to the issuance of notice respecting the redesignation of an area that includes any Federal lands, the State has provided written notice to the appropriate Federal Land Manager and afforded adequate opportunity (not in excess of 60 days) to confer with the State respecting the redesignation and to submit written comments and recommendations. In redesignating any area with respect to which any Federal Land Manager had submitted written comments and recommendations, the State shall have published a list of any inconsistency between such redesignation and such comments and recommendations (together with the reasons for making such redesignation against the recommendation of the Federal Land Manager); and

(v) The State has proposed the redesignation after consultation with the elected leadership of local and other substate general purpose governments in the area covered by the proposed redesignation.

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(3) Any area other than an area to which paragraph (e) of this section refers may be redesignated as Class III if—

(i) The redesignation would meet the requirements of paragraph (g)(2) of this section;

(ii) The redesignation, except any established by an Indian Governing Body, has been specifically approved by the Governor of the State, after consultation with the appropriate committees of the legislature, if it is in session, or with the leadership of the legislature, if it is not in session (unless State law provides that the redesignation must be specifically approved by State legislation) and if general purpose units of local government representing a majority of the residents of the area to be redesignated enact legislation or pass resolutions concurring in the redesignation;

(iii) The redesignation would not cause, or contribute to, a concentration of any air pollutant which would exceed any maximum allowable increase permitted under the classification of any other area or any national ambient air quality standard; and

(iv) Any permit application for any major stationary source or major modification, subject to review under paragraph (l) of this section, which could receive a permit under this section only if the area in question were redesignated as Class III, and any material submitted as part of that application, were available insofar as was practicable for public inspection prior to any public hearing on redesignation of the area as Class III.

(4) Lands within the exterior boundaries of Indian Reservations may be redesignated only by the appropriate Indian Governing Body. The appropriate Indian Governing Body may submit to the Administrator a proposal to redesignate areas Class I, Class II, or Class III: *Provided*, That:

(i) The Indian Governing Body has followed procedures equivalent to those required of a State under paragraphs (g)(2), (g)(3)(iii), and (g)(3)(iv) of this section; and

(ii) Such redesignation is proposed after consultation with the State(s) in which the Indian Reservation is located and which border the Indian Reservation.

(5) The Administrator shall disapprove, within 90 days of submission, a proposed redesignation of any area only if he finds, after notice and opportunity for public hearing, that such redesignation does not meet the procedural requirements of this paragraph or is inconsistent with paragraph (e) of this section. If any such disapproval occurs, the classification of the area shall be that which was in effect prior to the redesignation which was disapproved.

(6) If the Administrator disapproves any proposed redesignation, the State or Indian Governing Body, as appropriate, may resubmit the proposal after correcting the deficiencies noted by the Administrator.

(h) *Stack heights.* (1) The degree of emission limitation required for control of any air pollutant under this section shall not be affected in any manner by—

(i) So much of the stack height of any source as exceeds good engineering practice, or

(ii) Any other dispersion technique.

(2) Paragraph (h)(1) of this section shall not apply with respect to stack heights in existence before December 31, 1970, or to dispersion techniques implemented before then.

(i) *Review of major stationary sources and major modifications—Source applicability and general exemptions.* (1) No major stationary source or major modification shall be constructed unless the requirements of paragraphs (j) through (r) of this section, as applicable, have been met. The requirements of paragraphs (j) through (r) shall apply to a proposed source or modification only with respect to those pollutants for which it would be a major stationary source or major modification.

(2) The requirements of paragraphs (j) through (r) of this section shall not apply to a major stationary source or major modification that was subject to the review requirements of 40 CFR 52.21(d)(1) for the prevention of significant deterioration as in effect before March 1, 1978, if the owner or operator—

(i) Obtained under 40 CFR 52.21 a final approval effective before March 1, 1978;

(ii) Commenced construction before March 19, 1979; and

(iii) Did not discontinue construction for a period of 18 months or more and completed construction within a reasonable time.

(3) The requirements of paragraphs (j) through (r) of this section shall not apply to a major stationary source or major modification that was not subject to 40 CFR 52.21 as in effect before March 1, 1978, if the owner or operator—

(i) Obtained all final Federal, State and local preconstruction permits necessary under the applicable State implementation plan before March 1, 1978;

(ii) Commenced construction before March 19, 1979; and

(iii) Did not discontinue construction for a period of 18 months or more and completed construction within a reasonable time.

(4) The requirements of paragraphs (j) through (r) of this section shall not apply to a major stationary source or major modification that was subject to 40 CFR 52.21 as in effect before March 1, 1978, if review of an application for approval for the source or modification under 40 CFR 52.21 would have been completed by March 1, 1978, but for an extension of the public comment period pursuant to a request for such an extension. In such a case, the application shall continue to be processed, and granted or denied, under 40 CFR 52.21 as in effect prior to March 1, 1978.

(5) The requirements of paragraphs (j), (l), (n) and (p) of this section shall not apply to a major stationary source or major modification with respect to a particular pollutant if the owner or operator demonstrates that—

(i) As to that pollutant, the source or modification is subject to the emission offset ruling (41 FR 55524), as it may be amended, or to regulations approved or promulgated pursuant to Section 173 of the Act; and

(ii) The source or modification would impact no area attaining the national ambient air quality standards (either internal or external to areas designated as nonattainment under Section 107 of the Act).

(6) The requirements of paragraphs (j) through (r) of this section shall not apply, upon written request of the Governor of a State, to a nonprofit health or education institution to be located in that State.

(7) A portable facility which has previously received construction approval under the requirements of this section as applicable may relocate without again being subject to those requirements if—

(i) Emissions from the facility would not exceed allowable emissions;

(ii) Emissions from the facility would impact no Class I area and no area where an applicable increment is known to be violated; and

(iii) Notice is given to the Administrator at least 30 days prior to such relocation identifying the proposed new location and the probable duration of operation at such location.

(j) *Control technology review.* (1) A major stationary source or major modification shall meet all applicable emission limitations under the State implementation plan and all applicable emission standards and standards of performance under 40 CFR Part 60 and Part 61.

(2) A major stationary source or major modification shall apply best available control technology for each applicable pollutant, unless the increase in allowable emissions of that pollutant from the source or modification would be less than 50 tons per year, 1,000 pounds per day, or 100 pounds per hour, whichever is most restrictive.

(i) The preceding hourly and daily rates shall apply only with respect to a pollutant for which an increment, or national ambient air quality standard, for a period less than 24 hours or for a

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24 hour period, as appropriate, has been established.

(ii) In determining whether and to what extent a modification would increase allowable emissions, there shall be taken into account no emission reductions achieved elsewhere at the source at which the modification would occur.

(3) In the case of a modification, the requirement for best available control technology shall apply only to each new or modified facility which would increase the allowable emissions of an applicable pollutant.

(4) Where a facility within a source would be modified but not reconstructed, the requirements for best available control technology, notwithstanding paragraph (j)(2) of this section, shall not apply to such facility if no net increase in emissions of an applicable pollutant would occur at the source, taking into account all emission increases and decreases at the source which would accompany the modification, and no adverse air quality impact would occur.

(5) For phased construction projects the determination of best available control technology shall be reviewed, and modified as appropriate, at the latest reasonable time prior to commencement of construction of each independent phase of the proposed source or modification.

(k) *Exemptions from impact analyses.* (1) The requirements of paragraphs (l), (n), and (p) shall not apply to a major stationary source or major modification with respect to a particular pollutant, if—

(i) The increase in allowable emissions of that pollutant from the source or modification would impact no Class I area and no area where an applicable increment is known to be violated; and

(ii) The increase in allowable emissions of that pollutant from the source or modification would be less than 50 tons per year, 1000 pounds per day, or 100 pounds per hour, whichever is more restrictive; or

(iii) The emissions of the pollutant are of a temporary nature including but not limited to those from a pilot plant, a portable facility, construction, or exploration; or

(iv) A source is modified, but no increase in the net amount of emissions for any pollutant subject to a national ambient air quality standard and no adverse air quality impact would occur.

(2) The hourly and daily rates set in paragraph (k)(1)(ii) of this section shall apply only with respect to a pollutant for which an increment, or national ambient air quality standard, for a period of less than 24 hours or for a 24 hour period, as appropriate, has been established.

(3) In determining for the purpose of paragraph (k)(1)(ii) of this section whether and to what extent the modification would increase allowable emissions, there shall be taken into account no emission reduction achieved elsewhere at the source at which the modification would occur.

(4) In determining for the purpose of paragraph (k)(1)(iv) of this section whether and to what extent there would be an increase in the net amount of emissions for any pollutant subject to a national ambient air quality standard from the source which is modified, there shall be taken into account all emission increases and decreases occurring at the source since August 7, 1977.

(5) The requirements of paragraphs (l), (n) and (p) of this section shall not apply to a major stationary source or to a major modification with respect to emissions from it which the owner or operator has shown to be fugitive dust.

(l) *Air quality review.* The owner or operator of the proposed source or modification shall demonstrate that allowable emission increases from the proposed source or modification, in conjunction with all other applicable emissions increases or reductions, would not cause or contribute to air pollution in violation of:

(1) Any national ambient air quality standard in any air quality control region; or

(2) Any applicable maximum allowable increase over the baseline concentration in any area.

(m) *Air quality models.* (1) All estimates of ambient concentrations required under this section shall be based on the applicable air quality models, data bases, and other requirements specified in the "Guideline on Air Quality Models" (OAQPS 1.2-080, U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards, Research Triangle Park, N.C. 27711, April 1978). This document is incorporated by reference. On April 27, 1978, the Office of the Federal Register approved this document for incorporation by reference. A copy of the guideline is on file in the Federal Register library.

(2) Where an air quality impact model specified in the "Guideline on Air Quality Models" is inappropriate, the model may be modified or another model substituted. Such a change must be subject to notice and opportunity for public comment under paragraph (r) of this section. Written approval of the Administrator must be obtained for any modification or substitution. Methods like those outlined in the "Workbook for the Comparison of Air Quality Models" (U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards, Research Triangle Park, N.C. 27711, May, 1978) should be used to determine the comparability of air quality models.

(3) The documents referenced in this paragraph are available for public inspection at EPA's Public Information Reference Unit and at the libraries of each of the ten EPA Regional Offices. Copies are available as supplies permit from the Library Service Office (MD-35), U.S. Environmental Protection Agency, Research Triangle Park, N.C. 27711. Also, copies may be purchased from the National Technical Information Service, 5285 Port Royal Road, Springfield, Va. 22161.

(n) *Monitoring.* (1) The owner or operator of a proposed source or modification shall, after construction of the source or modification, conduct such ambient air quality monitoring as the Administrator determines may be necessary to establish the effect which emissions from the source or modification of a pollutant for which a national ambient air quality standard exists (other than non-methane hydrocarbons) may have, or is having, on air quality in any area which such emissions would affect.

(2) As necessary to determine whether emissions from the proposed source or modification would cause or contribute to a violation of a national ambient air quality standard, any permit application submitted after August 7, 1978, shall include an analysis of continuous air quality monitoring data for any pollutant emitted by the source or modification for which a national ambient air quality standard exists, except non-methane hydrocarbons. Such data shall relate to, and shall have been gathered over, the year preceding receipt of the complete application, unless the owner or operator demonstrates to the Administrator's satisfaction that such data gathered over a portion or portions of that year or another representative year would be adequate to determine that the source or modification would not cause or contribute to a violation of a national ambient air quality standard.

(o) *Source information.* The owner or operator of a proposed source or modification shall submit all information necessary to perform any analysis or make any determination required under this section.

(1) With respect to a source or modification to which paragraphs (j), (l), (n) and (p) of this section apply, such information shall include:

(i) A description of the nature, location, design capacity, and typical operating schedule of the source or modification, including specifications and drawings showing its design and plant layout;

(ii) A detailed schedule for construction of the source or modification;

(iii) A detailed description as to what system of continuous emission reduction is planned for the source or modification, emission estimates, and any other information necessary to deter-

mine that best available control technology would be applied.

(2) Upon request of the Administrator, the owner or operator shall also provide information on:

(i) The air quality impact of the source or modification, including meteorological and topographical data necessary to estimate such impact; and

(ii) The air quality impacts, and the nature and extent of any or all general commercial, residential, industrial, and other growth which has occurred since August 7, 1977, in the area the source or modification would affect.

(p) *Additional impact analyses.* (1) The owner or operator shall provide an analysis of the impairment to visibility, soils and vegetation that would occur as a result of the source or modification and general commercial, residential, industrial and other growth associated with the source or modification. The owner or operator need not provide an analysis of the impact on vegetation having no significant commercial or recreational value.

(2) The owner or operator shall provide an analysis of the air quality impact projected for the area as a result of general commercial, residential, industrial and other growth associated with the source or modification.

(q) *Sources impacting Federal Class I areas—additional requirements.*—(1) *Notice to Federal Land Managers.* The Administrator shall provide notice of any permit application for a proposed major stationary source or major modification the emissions from which would affect a Class I area to the Federal Land Manager, and the Federal official charged with direct responsibility for management, of any lands within any such area. The Administrator shall provide such notice promptly after receiving the application. The Administrator shall also provide the Federal Land Manager and such Federal officials with a copy of the preliminary determination required under paragraph (r) of this section, and shall make available to them any materials used in making that determination, promptly after the Administrator makes it.

(2) *Federal Land Manager.* The Federal Land Manager and the Federal official charged with direct responsibility for management of such lands have an affirmative responsibility to protect the air quality related values (including visibility) of such lands and to consider, in consultation with the Administrator, whether a proposed source or modification will have an adverse impact on such values.

(3) *Denial—impact on air quality related values.* The Federal Land Manager of any such lands may demonstrate to the Administrator that the emissions from a proposed source or modification would have an adverse impact on the air quality-related values (including visibility) of those lands, notwithstanding that the change in air quality resulting from emissions from such source or modification would not cause or contribute to concentrations which would exceed the maximum allowable increases for a Class I area. If the Administrator concurs with such demonstration, then he shall not issue the permit.

(4) *Class I variances.* The owner or operator of a proposed source or modification may demonstrate to the Federal Land Manager that the emissions from such source or modification would have no adverse impact on the air quality related values of any such lands (including visibility), notwithstanding that the change in air quality resulting from emissions from such source or modification would cause or contribute to concentrations which would exceed the maximum allowable increases for a Class I area. If the Federal Land Manager concurs with such demonstration and he so certifies, the State may authorize the Administrator: *Provided,* That the applicable requirements of this section are otherwise met, to issue the permit with such emission limitations as may be necessary to assure that emissions of sulfur dioxide and particulate matter would not exceed the following maximum allowable increases over baseline concentration for such pollutants:

	Maximum allowable increase (micrograms per cubic meter)
Particulate matter:	
Annual geometric mean	19
24-hr maximum	37
Sulfur dioxide:	
Annual arithmetic mean	20
24-hr maximum	91
3-hr maximum	325

(5) *Sulfur dioxide variance by Governor with Federal Land Manager's concurrence.* The owner or operator of a proposed source or modification which cannot be approved under paragraph (q)(4) of this section may demonstrate to the Governor that the source cannot be constructed by reason of any maximum allowable increase for sulfur dioxide for a period of twenty-four hours or less applicable to any Class I area and, in the case of Federal mandatory Class I areas, that a variance under this clause would not adversely affect the air quality related values of the area (including visibility). The Governor, after consideration of the Federal Land Manager's recommendation (if any) and subject to his concurrence, may, after notice and public hearing, grant a variance from such maximum allowable increase. If such variance is granted, the Administrator shall issue a permit to such source or modification pursuant to the requirements of paragraph (q)(7) of this section: *Provided,* That the applicable requirements of this section are otherwise met.

(6) *Variance by the Governor with the President's concurrence.* In any case where the Governor recommends a variance in which the Federal Land Manager does not concur, the recommendations of the Governor and the Federal Land Manager shall be transmitted to the President. The President may approve the Governor's recommendation if he finds that the variance is in the national interest. If the variance is approved, the Administrator shall issue a permit pursuant to the requirements of paragraph (q)(7) of this section: *Provided,* That the applicable requirements of this section are otherwise met.

(7) *Emission limitations for Presidential or gubernatorial variance.* In the case of a permit issued pursuant to paragraph (q) (5) or (6) of this section the source or modification shall comply with such emission limitations as may be necessary to assure that emissions of sulfur dioxide from the source or modification would not (during any day on which the otherwise applicable maximum allowable increases are exceeded) cause or contribute to concentrations which would exceed the following maximum allowable increases over the baseline concentration and to assure that such emissions would not cause or contribute to concentrations which exceed the otherwise applicable maximum allowable increases for periods of exposure of 24 hours or less for more than 18 days, not necessarily consecutive, during any annual period:

Maximum Allowable Increase

(Micrograms per cubic meter)

Period of exposure	Terrain areas	
	Low	High
24-hr maximum	36	62
3-hr maximum	130	221

(r) *Public participation.* (1) Within 30 days after receipt of an application to construct, or any addition to such application, the Administrator shall advise the applicant of any deficiency in the application or in the information submitted. In the event of such a deficiency, the date of receipt of the application shall be, for the purpose of this section, the date on which the Administrator received all required information.

(2) Within 1 year after receipt of a complete application, the Administrator shall make a final determination on the application. This involves performing the following actions in a timely manner:

(i) Make a preliminary determination whether construction should be approved, approved with conditions, or disapproved.

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(ii) Make available in at least one location in each region in which the proposed source or modification would be constructed a copy of all materials the applicant submitted, a copy of the preliminary determination and a copy or summary of other materials, if any, considered in making the preliminary determination.

(iii) Notify the public, by advertisement in a newspaper of general circulation in each region in which the proposed source or modification would be constructed, of the application, the preliminary determination, the degree of increment consumption that is expected from the source or modification, and the opportunity for comment at a public hearing as well as written public comment.

(iv) Send a copy of the notice of public comment to the applicant and to officials and agencies having cognizance over the location where the proposed construction would occur as follows: State and local air pollution control agencies, the chief executives of the city and county where the source or modification would be located, any comprehensive regional land use planning agency and any State, Federal Land Manager, or Indian Governing Body whose lands may be affected by emissions from the source or modification.

(v) Provide opportunity for a public hearing for interested persons to appear and submit written or oral comments on the air quality impact of the source or modification, alternatives to the source or modification, the control technology required, and other appropriate considerations.

(vi) Consider all written comments submitted within a time specified in the notice of public comment and all comments received at any public hearing(s) in making a final decision on the approvability of the application. No later than 10 days after the close of the public comment period, the applicant may submit a written response to any comments submitted by the public. The Administrator shall consider the applicant's response in making a final decision. The Administrator shall make all comments available for public inspection in the same locations where the Administrator made available preconstruction information relating to the proposed source or modification.

(vii) Make a final determination whether construction should be approved, approved with conditions, or disapproved pursuant to this section.

(viii) Notify the applicant in writing of the final determination and make such notification available for public inspection at the same location where the Administrator made available preconstruction information and public comments relating to the source or modification.

(3) The requirements of paragraph (r) of this section shall not apply to any major stationary source or major modification which paragraph (k) would exempt from the requirements of paragraphs (l), (n), and (p), but only to the extent that, with respect to each of the criteria for construction approval under the applicable State implementation plan and for exemption under paragraph (k), requirements providing the public with at least as much participation in each material determination as those of paragraph (r) have been met in the granting of such construction approval.

(s) *Source obligation.* (1) Any owner or operator who constructs or operates a source or modification not in accordance with the application submitted pursuant to this section or with the terms of any approval to construct, or any owner or operator of a source or modification subject to this section who commences construction after the effective date of these regulations without applying for and receiving approval hereunder, shall be subject to appropriate enforcement action.

(2) Approval to construct shall become invalid if construction is not commenced within 18 months after receipt of such approval, if construction is discontinued for a period of 18 months or more, or if construction is not completed within a reasonable time. The Administrator may extend the 18-month period upon a satisfactory showing that an extension is justified. This provision does not apply to the time period between construction of the approved phases of a phased construction project; each phase must commence construction within 18 months of the projected and approved commencement date.

(3) Approval to construct shall not relieve any owner or operator of the responsibility to comply fully with applicable provisions of the State implementation plan and any other requirements under local, State, or Federal law.

(t) *Environmental impact statements.* Whenever any proposed source or modification is subject to action by a Federal Agency which might necessitate preparation of an environmental impact statement pursuant to the National Environmental Policy Act (42 U.S.C. 4321), review by the Administrator conducted pursuant to this section shall be coordinated with the broad environmental reviews under that Act and under Section 309 of the Clean Air Act to the maximum extent feasible and reasonable.

(u) *Disputed permits or redesignations.* If any State affected by the redesignation of an area by an Indian Governing Body, or any Indian Governing Body of a tribe affected by the redesignation of an area by a State, disagrees with such redesignation, or if a permit is proposed to be issued for any major stationary source or major modification proposed for construction in any State which the Governor of an affected State or Indian Governing Body of an affected tribe determines will cause or contribute to a cumulative change in air quality in excess of that allowed in this part within the affected State or Indian Reservation, the Governor or Indian Governing Body may request the Administrator to enter into negotiations with the parties involved to resolve such dispute. If requested by any State or Indian Governing Body involved, the Administrator shall make a recommendation to resolve the dispute and protect the air quality related values of the lands involved. If the parties involved do not reach agreement, the Administrator shall resolve the dispute and his determination, or the results of agreements reached through other means, shall become part of the applicable State implementation plan and shall be enforceable as part of such plan. In resolving such disputes relating to area redesignation, the Administrator shall consider the extent to which the lands involved are of sufficient size to allow effective air quality management or have air quality related values of such an area.

(v) *Delegation of authority.* (1) The Administrator shall have the authority to delegate his responsibility for conducting source review pursuant to this section, in accordance with paragraphs (v) (2) and (3) of this section.

(2) Where the Administrator delegates the responsibility for conducting source review under this section to any agency other than a Regional Office of the Environmental Protection Agency, the following provisions shall apply:

(i) Where the delegate agency is not an air pollution control agency, it shall consult with the appropriate State and local air pollution control agency prior to making any determination under this section. Similarly, where the delegate agency does not have continuing responsibility for managing land use, it shall consult with the appropriate State and local agency primarily responsible for managing land use prior to making any determination under this section.

(ii) The delegate agency shall send a copy of any public comment notice required under paragraph (r) of this section to the Administrator through the appropriate Regional Office.

(3) The Administrator's authority for reviewing a source or modification located on an Indian Reservation shall not be redelegated other than to a Regional Office of the Environmental Protection Agency, except where the State has assumed jurisdiction over such land under other laws. Where the

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State has assumed such jurisdiction, the Administrator may delegate his authority to the States in accordance with paragraph (v)(2) of this section.

(4) In the case of a source or modification which proposes to construct in a class III area, emissions from which would cause or contribute to air quality exceeding the maximum allowable increase applicable if the area were designated a class II area, and where no standard under section 111 of the act has been promulgated for such source category, the Administrator must approve the determination of best available control technology as set forth in the permit.

§ 52.01 [Amended]

2. In § 52.01, paragraph (f), which defines "best available control technology," is deleted and reserved.

3. In §§ 52.60 (AL), 52.96 (AK), 52.144 (AZ), 52.181 (AR), 52.270 (CA), 52.343 (CO), 52.382 (CT), 52.432 (DE), 52.499 (DC), 52.530 (FL), 52.581 (GA), 52.632 (HI), 52.683 (ID), 52.738 (IL), 52.793 (IN), 52.833 (IA), 52.884 (KS), 52.931 (KY), 52.986 (LA), 52.1029 (ME), 52.1116 (MD), 52.1165 (MA), 52.1180 (MI), 52.1234 (MN), 52.1280 (MS), 52.1339 (MO), 52.1382 (MT), 52.1436 (NB), 52.1485 (NV), 52.1529 (NH), 52.1603 (NJ), 52.1634 (NM), 52.1689 (NY), 52.1778 (NC), 52.1829 (ND), 52.1884 (OH), 52.1919 (OK), 52.1987 (OR), 52.2058 (PA), 52.2083 (RI), 52.2131 (SC), 52.2178 (SD), 52.2233 (TN), 52.2303 (TX), 52.2346 (UT), 52.2380 (VT), 52.2451 (VA), 52.2497 (WA), 52.2528 (WV), 52.2581 (WI), 52.2630 (WY), 52.2676 (GU), 52.2729 (PR), 52.2779 (VI), and 52.2827 (AmS), paragraphs (a) and (b) are revised to read as follows:

* * * * *

(a) The requirements of sections 160 through 165 of the Clean Air Act are not met, since the plan does not include approvable procedures for preventing the significant deterioration of air quality.

(b) *Regulation for preventing significant deterioration of air quality.* The provisions of § 52.21 (b) through (v) are hereby incorporated and made a part of the applicable State plan for the State of ———.

* * * * *

[FR Doc. 78-16890 Filed 6-14-78; 4:15 pm]

THE TEXT YOU ARE VIEWING IS A COMPUTER-GENERATED OR RETYPED VERSION OF A PAPER PHOTOCOPY OF THE ORIGINAL. ALTHOUGH CONSIDERABLE EFFORT HAS BEEN EXPENDED TO QUALITY ASSURE THE CONVERSION, IT MAY CONTAIN TYPOGRAPHICAL ERRORS. TO OBTAIN A LEGAL COPY OF THE ORIGINAL DOCUMENT, AS IT CURRENTLY EXISTS, THE READER SHOULD CONTACT THE OFFICE THAT ORIGINATED THE CORRESPONDENCE OR PROVIDED THE RESPONSE.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

MEMORANDUM:

DATE: November 24, 1986

SUBJECT: Need for a Short-term Best Available Control Technology (BACT) Analysis for the Proposed William A. Zimmer Power Plant

FROM: Gerald A. Emison, Director
Office of Air Quality Planning and Standards
(MD-10)

TO: David Kee, Director
Air Management Division, Region V (5AR-26)

This is in response to your November 17, 1986, memorandum, in which you requested comment on Region V's belief that prevention of significant deterioration (PSD) permits must contain short-term emission limits to ensure protection of the applicable national ambient air quality standards (NAAQS) and PSD increments. I concur with your position and emphasize to you that this position reflects our current national policy. Consequently, I recommend that you continue to identify this apparent deficiency to the Ohio Environmental Protection Agency and seek correction of the draft permit for the William A. Zimmer Power Plant.

The PSD regulations clearly require that the application of BACT conform with any applicable standard of performance under 40 CFR Part 60 at a minimum. However, this should not be taken to supercede any additional limitations as needed to enable the source to demonstrate compliance with the NAAQS and PSD increments. In the case of sulfur dioxide (SO2), source compliance with the 30-day rolling average emission limit under subpart D(a) does not adequately demonstrate compliance with the short-term NAAQS and PSD increments. Consequently, enforceable limits pertaining to the performance of the flue gas desulfurization system on a short-term basis must also be established. Note, however, that the short-term limits can result from either BACT analyses or the need to protect air quality. Therefore, the short-term limit could be more stringent than the BACT limit.

I recognize that the sulfur variability issue tends to complicate the setting of short-term SO2 emission limits, but such limits must be defined nevertheless. Continuous emission monitoring data from comparable sources can be used in order to estimate worst-case short-term SO2 emissions that could occur at the plant. The modeling techniques used to determine compliance with the short-term NAAQS and increments should employ the enforceable short-term SO2 emission limits which the permitting agency establishes.

CPDD:SIB:NSRS:D.deroech:m.Whitt629-5591:rtp MD15:11/19/86
deRoeck 5-29-3

From	Control No.
David Kee	CPDD-427
Subject and Date	**Date Rec'd**

Request for Guidance on Short Term BACT Analysis	11-18-86 Due Date 11-21-86
Referred(1) McCutchen (2) DeRoeck (3)	(4)
Date 11-18-86 11-18-86	
Reply Sent To	Date Released
Remarks Easy response -- Agree with Region 5; if disagree, see Darryl. Prepare reply for Gerald A. Emison's signature.	Acknowledged-Date No Answer Needed (Explain in Remarks)

MAIL CONTROL SCHEDULE

To: G.EMISON (EPA6200)

FROM: ARB/REG.V (EPA9553) (Posted) Mon 17-Nov-86 10:44 EST Sys 63 (39)

SUBJECT: Request for Guidance on Short-Term BACT Analysis

Request for Guidance on Short-Term BACT Analysis

David Kee, Director
Air Management Division (5AR-26)

Gerald A. Emison, Director
Office of Air Quality Planning & Standards

Region V has recently completed an evaluation of Ohio EPA's draft permit for the William A. Zimmer Power Station Plant. Compliance with all pertinent Clean Air Act requirements, including Best Available Control Technology (BACT) requirements, was evaluated. During the course of these evaluations, a potentially significant problem arose in dealing with this fossil-fueled power plant employing flue gas desulfurization (FGD). Ohio's SO2 BACT analyses and emissions limits appear to have been based solely on a 30-day rolling average, an approach consistent with Subpart D(a) provisions for fossil fuel fired steam electric generating units. Region V is concerned that no emission limits based on 3-hr or 24-hr averaging periods have been included in Ohio's draft permit. The Region believes that short-term limits are necessary to ensure protection of the NAAQS and to adequately assess and protect increment consumption.

Accordingly, Region V has expressed its concerns to Ohio about the potential need for the SO2 BACT analysis to consider the performance of FGD systems on a short-term basis (i.e., 3-hr and/or 24-hr). Region V has also indicated that such short-term limits are necessary to protect the NAAQS and PSD increments. Region V would appreciate your guidance, concurrence or comments on the BACT analysis issue. Since Region V and Ohio will be discussing the need for a short-term BACT analysis and emission limits within ten (10) days, a prompt response is important. If you have any questions regarding this matter, please contact Joseph Paisie of my staff at 886-5777.

September 2, 1997

Donald Sutton, Manager
Permits Section
Division of Air Pollution Control
Illinois Environmental Protection Agency
P.O. Box 19506
2200 Churchill Road
Springfield, Illinois 62794-9506

Dear Mr. Sutton:

The purpose of this letter is to provide further guidance on the major modification provisions of the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21, as applied to construction of a proposed soybean extraction plant (Application 96100019) at the Archer Daniels Midland (ADM) plant in Decatur, Illinois. Per electronic mail correspondence and telephone calls between USEPA and Illinois Environmental Protection Agency (IEPA) staff during the period August 21 to 28, 1997, the record is not complete regarding the BACT analyses for hexane and ethanol (VOM) emissions associated with the proposed project. USEPA staff also highlighted to IEPA staff concerns raised in my letter to you of January 7, 1997, regarding ADM's proposed use of fugitive roadway dust emission reductions as offsets for increases resulting from a proposed project. In addition, it should be noted that, since it is our understanding that there are several proposed ADM projects that will need PSD review, if there is an integral relationship between any of these projects or sub-projects such that one depends upon another, then construction may not commence on any part of these inter-dependent projects until a PSD permit or permits has/have been issued for the whole project, that is, all of the integral portions of the project.

The following summarizes those concerns raised between USEPA and IEPA staff on the proposed permit which have yet to be addressed:

A "top-down" analysis of control technologies was not presented to support the BACT determinations of the proposed permit, nor have the BACT analyses themselves been provided. My staff has expressed a request for these analyses but have yet to receive them. The permitting record is incomplete without such analyses.

The VOM consumption limit for hexane, 10.4 pounds per ton of soybean processed, does not compare well with other similar limits from previous BACT determinations. A BACT determination in 1981 for Boon Valley Co-op and Owensboro Grain established a 2.9 pounds per ton limit. A PSD permit issued in the last several months to an ADM facility in North Kansas City, MO has a limit of 0.25 gallon per ton. Since the density of hexane is 5.63 pounds per gallon, this limit is equal to about 1.4 pounds per ton. Given that there is room for discussion whether pounds of hexane lost, consumed, and emitted are equivalent terms, the proposed limit seems well in excess of established limits.

Based on the information given to USEPA at this time, the proposed soybean extraction project appears to be a major modification pursuant to PSD for PM. More data is needed to make an accurate PSD determination with regard to the creditable contemporaneous PM emission increases and decreases claimed for this project. Unless ADM can prove through the netting of emissions that the overall increase in PM emissions from this project will not exceed major modification significance level, 15 tpy, PSD requirements do apply.

Leak detection and repair (LDAR) for the proposed project should be more well-defined. For example, what is the meaning of "prompt repair" and "detailed inspection"?

The following are additional issues of concern the USEPA has regarding the proposed permit:

BACT is an emission limitation. The proposed permit does not include an emission rate limit for VOM. The BACT rate must be directly related to emissions to the atmosphere.

How will ADM maintain records of VOM usage? Is the area of the proposed project sufficiently separated from the rest of the operations at the Decatur facility such that all VOM entering the area are readily recorded?

A detailed list of PM-emitting units/equipment at ADM and related maximum PM emission rates is attached to the proposed permit. The same type of list should be attached for VOM.

The liquid to gas (L/G) ratio defined in the proposed permit

is not a true L/G ratio. The proposed permit sets a limit for the mineral oil scrubber of 5 gallons per minute of scrubber cross-sectional area. This only relates to liquid flow and not to gas flow. The proposed permit should include a true L/G ratio limitation, and scrubber gas and liquid flow rates need to be monitored.

I hope you will find this information useful. If we can answer any questions regarding these comments, or if we can provide any further guidance, please contact John Kelly, of my staff, at (312) 886-4882. Once again, thank you for your commitment to working with us to improve the permitting process.

Sincerely yours,

/s/

Cheryl L. Newton, Chief
Permits and Grants Section

AIR AND RADIATION DIVISION
77 WEST JACKSON BOULEVARD (A-18J)
CHICAGO, ILLINOIS 60604
(800) 621-8431 OR (312) 353-2212

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF AIR AND RADIATION

MEMORANDUM

SUBJECT: Applicability of New Source Review Circumvention Guidance to 3M - Maplewood, Minnesota

FROM: John B. Rasnic, Director
Stationary Source Compliance Division

Office of Air Quality Planning and Standards

TO: George T. Czerniak, Chief
Air Enforcement Branch
Region V

This is in response to your memorandum dated March 16, 1992, requesting guidance on New Source Review (NSR) permitting for the Minnesota mining and Manufacturing (3M) Center located in Maplewood, Minnesota. Specifically, you requested guidance on the applicability of the circumvention guidance to this source and other sources in similar situations. We also received from your staff more information about the modifications at 3M and we suggested that you issue a SS114 request to the source for more inf ormation. In early November, we received a copy of the response to the SS114 request dated October 30, 1992. We hope this memorandum provides sufficient guidance on permitting this source and other sources in similar situations.

Background

In your memorandum of March 16, 1992, you notified us that the 3M Center in Maplewood, Minnesota received four synthetic minor permits for modifications between October 1991 and March 1992. The permits for the four modifications combined allow emission increases of 33.6 tons per year (tpy) of particulates, 39.8 tpy of sulfur dioxide, 39.4 tpy of nitrogen dioxide, 22.0 tpy of carbon monoxide, and 119.2 tpy of volatile organic compounds. You learned during the Region's discussions with Minnesota that i n 18 months, the source received 12 minor permits, and applied for several other minor permits. As a result, you indicated to the Minnesota Pollution Control Agency (MPCA) that 3M may be circumventing the Prevention of Significant Deterioration (PSD) regulations through these small projects. The MPCA, however, felt that these modifications were justified as separate modifications based on each 3M division pursuing its own research schedule.

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Although it is somewhat unclear, the response to the SS114 request arguably supports 3M's justification. Yet in light of criteria for identifying circumvention situations, as further explained below, the Stationary Source Compliance Division (SSCD) believes the source may not have been permitted properly for its modifications.

EPA Policy and Authority

EPA stated in the June 28, 1989 Federal Register notice on the definition of federally enforceable (54 FR 27274) and in its June 13, 1989 guidance on "Limiting Potential to Emit in New Source Permitting" that it is not only improper but also in violation of the Clean Air Act to construct a source or major modification with a minor source permit when there is intent to operate as a major source or major modification. Permits with conditions that do not reflect a source's planned mode of operation are s
ham permits, are void ab initio, and cannot shield a source from the requirement to undergo preconstruction review. 40 CFR SS52.21(r)(4) requires application of NSR requirements to a source that asks for a relaxation of permit limits which would make the source major. EPA stated that it will require application of SS52.21(r)(4) even where a source legitimately changes a project after finding it cannot comply with the operating restrictions which were taken in good faith.

Generally in "sham" permitting, a source attempts to expedite construction by securing minor source status through permits containing operational restrictions from which the source intends to free itself shortly after completion of construction and commencement of operation. Such attempts are treated as unlawful circumvention of the preconstruction review requirements. Similarly, attempts to expedite construction by securing several minor source permits and avoiding major modification requirements should be treated as circumvention. A memorandum dated September 18, 1989 from John Calcagni to William Hathaway stated this position (see Memorandum 4.42 in the NSR Guidance Notebook).

EPA stated in the 1989 Federal Register notice that it is not possible to set forth, in detail, the circumstances in which EPA considers an owner or operator to have evaded preconstruction review through minor permits, and thus subject itself to enforcement sanctions under SSSS113 and 167 from the beginning of construction. However, EPA will look to objective indicia to identify circumvention situations. For example, EPA provided examples of objective criteria in the June 13, 1989 guidance on limiting potential to emit. EPA also stated some criteria in the Federal Register notice which include: the filing of an application for a federal PSD permit at or near the same time as a state minor source permit; the economic realities surrounding a transaction; and projected levels of operation as portrayed to

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lending institutions and other records of projected demand and output. EPA stated that where it appears obvious that a proposed source or modification, by its physical and operational design characteristics, could not economically be run at minor source levels for an appreciable length of time, EPA will consider minor source limits taken by the source unrealistic and sham.

Specific Criteria

Similar to the 1989 guidance, this memorandum provides criteria to permitting and enforcement authorities to apply when making determinations whether a source is circumventing major NSR through the minor modification process.

1. Filing of more than one minor source or minor modification application associated with emissions increases at a single plant within a short time period.

If a source files more than one minor source permit application simultaneously or within a short time period of each other, this may constitute strong evidence of an intent to circumvent the requirements of preconstruction review. Authorities should scrutinize applications that relate to the same process or units that the source files either before initial operation of the unit or after less than a year of operation. The September 18, 1989 memorandum from John Calcagni to William Hathaway states that two or more related minor changes over a short time period should be studied for possible circumvention.

2. Application of funding.

Applications for commercial loans or, for public utilities, bond issues, should be scrutinized to see if the source has treated the projects as one modification for financial purposes. If the project would not be funded or if it would not be economically viable if operated on an extended basis (at least a year) without the other projects, this should be considered evidence of circumvention.

3. Reports of consumer demand and. projected production levels.

Stockholder reports, reports to the Securities and Exchange Commission, utility board reports, or business permit applications should be reviewed for projected operation or production levels. If reported levels are necessary to meet projected consumer demand but are higher than permitted levels, this is additional evidence of circumvention.

4. Statements of authorized representatives of the source regarding plans for operation.

Statements by representatives of the source to EPA or to State or local permitting agencies about the source's plans for operation can be evidence to show intent to circumvent preconstruction review requirements.

5. EPA's own analysis of the economic realities of the projects considered together.

EPA may determine that it is reasonable to expect that company management would coordinate the planning and execution of projects considering their intrinsic relationship with each other (physical proximity, stages of production process, etc.) and their impact on economic viability of the plant (scheduling down time in light of production targets, economies of scale, etc.).

Analysis of 3M-Maplewood

Although 3M applied for and received several minor source permits within 18 months, in response to the SS114 request, 3M stated that independent divisions at the plant made the funding

decisions for each independent project and that each project is independently viable. Thus, they suggest, the projects are not part of an attempt to circumvent preconstruction review. 3M and Minnesota have indicated that the divisions, actions should be reviewed separately and should not be treated as parts of a whole. However, the law plainly treats the Maplewood plant as one major emitting facility for NSR purposes. The NSR regulations do not provide special treatment because it is a research and development plant. Further, given the nature of this source, under normal conditions, a certain level of production or research development of new products can be expected. Although the NSR program generally allows sources to modify below significance levels without aggregating other contemporaneous net increases, sources c annot use the minor modification process to circumvent major modification requirements.

Where a source is permitted for several minor modifications that may in good faith be intended to be,separate but result in the source's aggregate increases to be major even considering decreases over a short time period (e.g., one year or 18 months), the modifications may require major new source review. Such modifications could require NSR if they are viewed as being consistent with the source's overall production goals or plans for a short planning period. In other words, 3M should not benefit fro m the absence of a plant-wide production plan. Given the nature of the plant's work, 3M may be able to reasonably anticipate that modifications will occur within a relatively short period of time.

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Reports on consumer demand and projected production or emission levels may provide evidence that this plant is expected to modify regularly in response to such demands or research needs. some minimum level of research activity and commensurate emissions, source-wide, perhaps could be expected from year to year, as would be expected to keep the 3M plant productive or operable. These emissions and thereby modifications cannot be presumed to be independent given the plant's overall basic purpose to support a variety of research and development activities. Therefore, even though each research project may have been individually conceived and separately funded, it is appropriate to look at the overall expected research activity in assessing NSR applicability and enforcement.

without regard to whether 3M intended to circumvent NSR requirements, this source and the State should discuss alternative permitting that could minimize the uncertainty of intent. Although we cannot require aggregation of all de minimis net increases, we believe that net increases should be aggregated for each "planning period" of the plant. One way to treat this source is to set a plant-wide emissions level, that can be raised only by going through major NSR. Recently, we worked with you and the MP CA to develop a plantwide emissions cap permit for a 3M facility in St. Paul. Although there are a number of concerns that must be addressed in such an approach, we believe that the source and the State would benefit from the certainty that such an approach provides.

If you have any questions regarding this matter, please contact Clara Poffenberger at (703) 308-8709.

cc: Karen Schapiro, OE
Greg Foote, OGC
Bill Lamason, AQMD Air Division

Example
PSD Env Bes
Approved

Coshocton County

PUBLIC NOTICE

DIRECTOR'S INTENTION TO APPROVE A POLLUCTION CONTROL PROJECT REQUEST BY STONE CONTAINER CORPORATION, COSHOCTON, OHIO

Public notice is hereby given that the Director of the Ohio EPA intends to approve a request received from Stone Container Corporation for installation of a proposed environmentally beneficial project at their Coshocton paper production facility.

Stone is requesting approval to install a regenerative thermal oxidizer to control volatile organic compounds and reduce odors from the existing Copeland Reactor unit. This control device will reduce approximately 3495 tons/year of actual VOC emissions. Carbon Monoxide emissions are also projected to decrease by 496 tons/year. However, emissions of NO_x will increase by 175 tons/year.

Any increase in NO_x of this magnitude at a major facility would normally require prevention of significant deterioration (PSD) permit review by Ohio EPA, under 40 CFR Part 52.21, and OAC Chapter 3745-31. However, USEPA has issued guidance entitled "Guidance on Excluding Pollution Control Projects from New Source Review", for the exclusion of pollution control projects from the PSD permit requirements. The permitting authority, Ohio EPA, is to review any requests made under this guidance for exclusion from PSD review. The project must also meet the requirements of the OAC Chapter 3745-31.

Ohio EPA has reviewed Stone Container's submittal, and finds that it meets the criteria of an environmentally beneficial pollution control project under the USEPA Guidance and OAC Chapter 3745-31. Therefore, the Director intends to issue a letter of approval to Stone Container so that they may proceed with this installation.

Ohio EPA is accepting comments from the public during the 30 day comment period, which commences with the date of this notice. Please submit any comments in writing to Fred Klingelhafer, APC Supervisor, Ohio EPA-Southeast District Office, 2195 Front Street, Logan, Ohio, 43138. The Director will consider all comments submitted during this period before issuing any final approval to Stone Container Corporation.

OhioEPA
State of Ohio Environmental Protection Agency

STREET ADDRESS: MAILING ADDRESS:

Lazarus Government Center
122 S. Front Street
Columbus, Ohio 43215

TELE: (614) 644-3020 FAX: (614) 644-2329

October 21, 1996

Cheryl Newton
USEPA - Region 5
Air and Radiation Div.
Regulation Development (AR-18J)
77 West Jackson Street
Chicago, IL 60604

Dear Ms. Newton:

Enclosed please find a copy of the public notice sent to the local newspaper early this month, which proposes to approve an environmentally beneficial project for Stone Container Corporation, in Coshocton County.

This request has been under review by Ohio EPA, and we have determined that it fits the USEPA Guidance on Excluding Pollution Control Projects from New Source PSD Review. More details are provided in the attached notice.

If you have any further questions, you or your staff may contact me at (614) 644-2270.

Sincerely,

Misty Parsons
Environmental Specialist
Division of Air Pollution Control

cc: Mike Hopkins, AQM&P

OhioEPA
State of Ohio Environmental Protection Agency

STREET ADDRESS:
Lazarus Government Center
122 S. Front Street
Columbus, Ohio 43215

TELE: (614) 644-3020 FAX: (614) 644-2329

MAILING ADDRESS:
P.O. Box 1049
Columbus, OH 43216-1049

October 30, 1996

Caushal Gupta
USEPA - Region 5
Air and Radiation Div.
Regulation Development (AR-18J
77 West Jackson Street
Chicago, IL 60604

Dear Mr. Gupta:

Enclosed is the additional information you requested concerning the Stone Container Corporation, Inc. request for an environmentally beneficial project determination and exclusion from PSD review.

They are planning to install a VOC control device, a regenerative thermal oxidizer. A comparatively small increase in NOx emissions will result from the operation of the incinerator, but a large decrease in VOC will be achieved (see details in attached). There will also be a reduction in nuisance odors and HAPs emissions. They will be required to demonstrate that the projected emissions changes are accurate, once the control device begins operation.

A public notice of the Director's intention to approve this project was placed in the news paper, and the 30-day comment period will expire soon. Please notify me soon if you have any comments.

Thank you for you interest in this matter.

Sincerely

Misty Parsons
Environmental Specialist

cc: Mike Hopkins, Manager, AQM&P
Ron Hancher, SEDO

Bob Taft, Governor
Maureen O'Connor, Lieutenant Governor
Christopher Jones, Director

Printed on Recycled Paper

OhioEPA
State of Ohio Environmental Protection Agency

STREET ADDRESS:
Lazarus Government Center
122 S. Front Street
Columbus, Ohio 43215

TELE: (614) 644-3020 FAX: (614) 644-2329

MAILING ADDRESS:

RE: COSHOCTON COUNTY
STONE CONTAINER CORPORATION
RTO PROJECT

Gary G. Egleston - Regional Environmental Manager
Stone Container Corporation
Containerboard & Paper Division
1979 Lakeside Parkway Suite 300
Tucker, Georgia 30084

Dear Mr. Egleston:

In February, 1996, you sent a request to Ronald Hancher of our Southeast District Office requesting a waiver from the federal PSD requirements contained 40 CFR PART 52.21 and OAC Chapter 3745-31 for your proposed pollution control project on your Copeland Reactor located in Coshocton. In August you sent the modeling and additional information required for review of this type of request.

The Division of Air Pollution Control has reviewed your request and determined that this project is an environmentally beneficial pollution control project under the USEPA Guidance and OAC Chapter 3745-31. In order to fulfil the requirements of the USEPA Guidance, the Ohio EPA has published an explanation of our intention to approve this request in the local newspaper for public comment.

The Ohio EPA did not receive any formal comments concerning this project within the 30 day comment period, however USEPA Region 5 did request additional information from us. USEPA has verbally informed us that they agree that the project should be approved. Therefore, the Ohio EPA approves the installation of a Regenerative Thermal Oxidizer on your Copeland Reactor in Coshocton for the purpose of controlling VOC and CO emissions. You may proceed with the installation of the control system at your earliest convenience.

Once the system is operational, you will be required to provide some demonstration that the outlet emissions are as expected. Our Southeast District Office will work with you in satisfying this requirement. If you have any questions please contact Ronald Hancher of our Southeast District Office at 614-385-8501.

Sincerely,

Donald R. Schregardus
Director
Ohio Environmental Protection Agency

cc: Ronald Hancher, SEDO

MP/RH

Bob Taft, Governor
Maureen O'Connor, Lieutenant Governor
Christopher Jones, Director

Printed on Recycled Paper

July 1, 1994

MEMORANDUM

SUBJECT: Pollution Control Projects and New Source Review (NSR) Applicability

FROM: John S. Seitz, Director
Office of Air Quality Planning and Standards (MD-10)

TO: Director, Air, Pesticides and Toxics Management Division, Regions I and IV
Director, Air and Waste Management Division, Region II
Director, Air, Radiation and Toxics Division, Region III
Director, Air and Radiation Division, Region V
Director, Air, Pesticides and Toxics Division, Region VI
Director, Air and Toxics Division, Regions VII, VIII, IX and X

This memorandum and attachment address issues involving the Environmental Protection Agency's (EPA's) NSR rules and guidance concerning the exclusion from major NSR of pollution control projects at existing sources. The attachment provides a full discussion of the issues and this policy, including illustrative examples.

For several years, EPA has had a policy of excluding certain pollution control projects from the NSR requirements of parts C and D of title I of the Clean Air Act (Act) on a case-by-case basis. In 1992, EPA adopted an explicit pollution control project exclusion for electric utility generating units [see 57 FR 32314 (the "WEPCO rule" or the "WEPCO rulemaking")]. At the time, EPA indicated that it would, in a subsequent rulemaking, consider adopting a formal pollution control project exclusion for other source categories [see 57 FR 32332]. In the interim, EPA stated that individual pollution control projects

involving source categories other than utilities could continue to be excluded from NSR by permitting authorities on a case-by-case basis [see 57 FR at 32320]. At this time, EPA expects to complete a rulemaking on a pollution control project exclusion for other source categories in early 1996. This memorandum and attachment provide interim guidance for permitting authorities on the approvability of these projects pending EPA's final action on a formal regulatory exclusion.

The attachment to this memorandum outlines in greater detail the type of projects that may qualify for a conditional exclusion from NSR as a pollution control project, the safeguards that are to be met, and the procedural steps that permitting authorities should follow in issuing an exclusion. Projects that do not meet these safeguards and procedural steps do not qualify for an exclusion from NSR under this policy. Pollution control projects potentially eligible for an exclusion (provided all applicable safeguards are met) include the installation of conventional or innovative emissions control equipment and projects undertaken to accommodate switching to an inherently less-polluting fuel, such as natural gas. Under this guidance, States may also exclude as pollution control projects some material and process changes (e.g., the switch to a less polluting coating, solvent, or refrigerant) and some other types of pollution prevention projects undertaken to reduce emissions of air pollutants subject to regulation under the Act.

The replacement of an existing emissions unit with a newer or different one (albeit more efficient and less polluting) or the reconstruction of an existing emissions unit does not qualify as a pollution control project. Furthermore, this guidance only applies to physical or operational changes whose primary function is the reduction of air pollutants subject to regulation under the Act at existing major sources. This policy does not apply to air pollution controls and emissions associated with a proposed new source. Similarly, the fabrication, manufacture or production of pollution control/prevention equipment and inherently less-polluting fuels or raw materials are not pollution control projects under this policy (e.g., a physical or operational change for the purpose of producing reformulated gasoline at a refinery is not a pollution control project).

It is EPA's experience that many bona fide pollution control projects are not subject to major NSR requirements for the simple reason that they result in a reduction in annual emissions at the source. In this way, these pollution control projects are outside major NSR coverage in accordance with the general rules for determining applicability of NSR to modifications at existing

sources. However, some pollution control projects could result in significant potential or actual increases of some pollutants. These latter projects comprise the subcategory of pollution control projects that can benefit from this guidance.

A pollution control project must be, on balance, "environmentally beneficial" to be eligible for an exclusion. Further, an environmentally-beneficial pollution control project may be excluded from otherwise applicable major NSR requirements only under conditions that ensure that the project will not cause or contribute to a violation of a national ambient air quality standard (NAAQS), prevention of significant deterioration (PSD) increment, or adversely affect visibility or other air quality related value (AQRV). In order to assure that air quality concerns with these projects are adequately addressed, there are two substantive and two procedural safeguards which are to be followed by permitting authorities reviewing projects proposed for exclusion.

First, the permitting authority must determine that the proposed pollution control project, after consideration of the reduction in the targeted pollutant and any collateral effects, will be environmentally beneficial. Second, nothing in this guidance authorizes any pollution control project which would cause or contribute to a violation of a NAAQS, or PSD increment, or adversely impact an AQRV in a class I area. Consequently, in addition to this "environmentally-beneficial" standard, the permitting authority must ensure that adverse collateral environmental impacts from the project are identified, minimized, and, where appropriate, mitigated. For example, the source or the State must secure offsetting reductions in the case of a project which will result in a significant increase in a nonattainment pollutant. Where a significant collateral increase in actual emissions is expected to result from a pollution control project, the permitting authority must also assess whether the increase could adversely affect any national ambient air quality standard, PSD increment, or class I AQRV.

In addition to these substantive safeguards, EPA is specifying two procedural safeguards which are to be followed. First, since the exclusion under this interim guidance is only available on a case-by-case basis, sources seeking exclusion from major NSR requirements prior to the forthcoming EPA rulemaking on a pollution control project exclusion must, before beginning construction, obtain a determination by the permitting authority that a proposed project qualifies for an exclusion from major NSR requirements as a pollution control project. Second, in considering this request, the permitting authority must afford the public an opportunity to review and comment on the source's

application for this exclusion. It is also important to note that any project excluded from major new source review as a pollution control project must still comply with all otherwise applicable requirements under the Act and the State implementation plan (SIP), including minor source permitting.

This guidance document does not supersede existing Federal or State regulations or approved SIP's. The policies set out in this memorandum and attachment are intended as guidance to be applied only prospectively (including those projects currently under evaluation for an exclusion) during the interim period until EPA takes action to revise its NSR rules, and do not represent final Agency action. This policy statement is not ripe for judicial review. Moreover, it is not intended, nor can it be relied upon, to create any rights enforceable by any party in litigation with the United States. Agency officials may decide to follow the guidance provided in this memorandum, or to act at variance with the guidance, based on an analysis of specific circumstances. The EPA also may change this guidance at any time without public notice. The EPA presently intends to address the matters discussed in this document in a forthcoming NSR rulemaking regarding proposed changes to the program resulting from the NSR Reform process and will take comment on these matters as part of that rulemaking.

As noted above, a detailed discussion of the types of projects potentially eligible for an exclusion from major NSR as a pollution control project, as well as the safeguards such projects must meet to qualify for the exclusion, is contained in the attachment to this memorandum. The Regional Offices should send this memorandum with the attachment to States within their jurisdiction. Questions concerning specific issues and cases should be directed to the appropriate EPA Regional Office. Regional Office staff may contact David Solomon, Chief, New Source Review Section, at (919) 541-5375, if they have any questions.

Attachment

cc: Air Branch Chief, Regions I-X
NSR Reform Subcommittee Members

Attachment

GUIDANCE ON EXCLUDING POLLUTION CONTROL PROJECTS FROM MAJOR NEW SOURCE REVIEW (NSR)

I. Purpose

The Environmental Protection Agency (EPA) presently expects to complete a rulemaking on an exclusion from major NSR for pollution control projects by early 1996. In the interim, certain types of projects (involving source categories other than utilities) may qualify on a case-by-case basis for an exclusion from major NSR as pollution control projects. Prior to EPA's final action on a regulatory exclusion, this attachment provides interim guidance for permitting authorities on the types of projects that may qualify on a case-by-case basis from major NSR as pollution control projects, including the substantive and procedural safeguards which apply.

II. Background

The NSR provisions of part C [prevention of significant deterioration (PSD)] and part D (nonattainment requirements) of title I of the Clean Air Act (Act) apply to both the construction of major new sources and the modification of existing major sources.[1] The modification provisions of the NSR programs in parts C and D are based on the broad definition of modification in section 111(a)(4) of the Act. That section contemplates a two-step test for determining whether activities at an existing major facility constitute a modification subject to new source requirements. In the first step, the reviewing authority determines whether a physical or operational change will occur. In the second step, the question is whether the physical or operational change will result in any increase in emissions of any regulated pollutant.

The definition of physical or operational change in section 111(a)(4) could, standing alone, encompass the most mundane activities at an industrial facility (even the repair or replacement of a single leaky pipe, or a insignificant change in the way that pipe is utilized). However, EPA has recognized that Congress did not intend to make every activity at a source subject to new source requirements under parts C and D. As a result, EPA has by regulation limited the reach of the modification provisions of parts C and D to only major modifications. Under NSR, a "major modification" is generally a

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[1]The EPA's NSR regulations for nonattainment areas are set forth at 40 CFR 51.165, 52.24 and part 51, Appendix S. The PSD program is set forth in 40 CFR 52.21 and 51.166.

physical change or change in the method of operation of a major stationary source which would result in a significant net emissions increase in the emissions of any regulated pollutant [see, e.g., 40 CFR 52.21(b)(2)(i)]. A "net emissions increase" is defined as the increase in "actual emissions" from the particular physical or operational change together with any other contemporaneous increases or decreases in actual emissions [see, e.g., 40 CFR 52.21(b)(3)(i)]. In order to trigger major new source review, the net emissions increase must exceed specified "significance" levels [see, e.g., 40 CFR 52.21(b)(2)(i) and 40 CFR 52.21(b)(23)]. The EPA has also adopted common-sense exclusions from the "physical or operational change" component of the definition of "major modification." For example, EPA's regulations contain exclusions for routine maintenance, repair, and replacement; for certain increases in the hours of operation or in the production rate; and for certain types of fuel switches [see, e.g., 40 CFR 52.21(b)(2)(iii)].

In the 1992 "WEPCO" rulemaking [57 FR 32314], EPA amended its PSD and nonattainment NSR regulations as they pertain to utilities by adding certain pollution control projects to the list of activities excluded from the definition of physical or operational changes. In taking that action, EPA stated it was largely formalizing an existing policy under which it had been excluding individual pollution control projects where it was found that the project "would be environmentally beneficial, taking into account ambient air quality" [57 FR at 32320; see also id., n. 15].[2]

The EPA has provided exclusions for pollution control projects in the form of "no action assurances" prior to November 15, 1990 and nonapplicability determinations based on Act changes as of November 15, 1990 (1990 Amendments). Generally, these exclusions addressed clean coal technology projects and fuel switches at electric utilities.

Because the WEPCO rulemaking was directed at the utility industry which faced "massive industry-wide undertakings of pollution control projects" to comply with the acid rain provisions of the Act [57 FR 32314], EPA limited the types of projects eligible for the exclusion to add-on controls and fuel switches at utilities. Thus, pollution control projects under the WEPCO rule are defined as:

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[2]This guidance pertains only to source categories other than electric utilities, and EPA does not intend for this guidance to affect the WEPCO rulemaking in any way.

> any activity or project undertaken at an existing electric utility steam generating unit for purposes of reducing emissions from such unit. Such activities or projects are limited to:
>
> (A) The installation of conventional or innovative pollution control technology, including but not limited to advanced flue gas desulfurization, sorbent injection for sulfur dioxide (SO_2) and nitrogen oxides (NO_x) controls and electrostatic precipitators;
>
> (B) An activity or project to accommodate switching to a fuel which is less polluting than the fuel in use prior to the activity or project . . .

[40 CFR 51.165(a)(1)(xxv) (emphasis added)]. The definition also includes certain clean coal technology demonstration projects. Id.

The EPA built two safeguards into the exclusion in the rulemaking. First, a project that meets the definition of pollution control project will not qualify for the exclusion where the "reviewing authority determines that (the proposed project) renders the unit less environmentally beneficial . . ." [see, e.g., 51.165(a)(1)(v)(C)(8)]. In the WEPCO rule, EPA did not provide any specific definition of the environmentally-beneficial standard, although it did indicate that the pollution control project provision "provides for a case-by-case assessment of the pollution control project's net emissions and overall impact on the environment" [57 FR 32321]. This provision is buttressed by a second safeguard that directs permitting authorities to evaluate the air quality impacts of pollution control projects that could--through collateral emissions increases or changes in utilization patterns--adversely impact local air quality [see 57 FR 32322]. This provision generally authorizes, as appropriate, a permitting authority to require modelling of emissions increases associated with a pollution control project. Id. More fundamentally, it explicitly states that no pollution control project under any circumstances may cause or contribute to violation of a national ambient air

quality standard (NAAQS), PSD increment, or air quality related value (AQRV) in a class I area. Id.[3]

As noted, the WEPCO rulemaking was expressly limited to existing electric utility steam generating units [see, e.g., 40 CFR 51.165(a)(1)(v)(C)(8) and 51.165(a)(1)(xx)]. The EPA limited the rulemaking to utilities because of the impending acid rain requirements under title IV of the Act, EPA's extensive experience with new source applicability issues for electric utilities, the general similarity of equipment, and the public availability of utility operating projections. The EPA indicated it would consider adopting a formal NSR pollution control project exclusion for other source categories as part of a separate NSR rulemaking. The rulemaking in question is now expected to be finalized by early 1996. On the other hand, the WEPCO rulemaking also noted that EPA's existing policy was, and would continue to be, to allow permitting authorities to exclude pollution control projects in other source categories on a case-by-case basis.

III. Case-By-Case Pollution Control Project Determinations

The following sections describe the type of projects that may be considered by permitting authorities for exclusion from major NSR as pollution control projects and two safeguards that permitting authorities are to use in evaluating such projects--the environmentally-beneficial test and an air quality impact assessment. To a large extent, these requirements are drawn from the WEPCO rulemaking. However, because the WEPCO rule was designed for a single source category, electric utilities, it cannot and does not serve as a complete template for this

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[3]The WEPCO rule refers specifically to "visibility limitation" rather than "air quality related values." However, EPA clearly stated in the preamble to the final rule that permitting agencies have the authority to "solicit the views of others in taking any other appropriate remedial steps deemed necessary to protect class I areas. . .. The EPA emphasizes that all environmental impacts, including those on class I areas, can be considered. . .." [57 FR 32322]. Further, the statutory protections in section 165(d) plainly are intended to protect against any "adverse impact on the AQRV of such [class I] lands (including visibility)." Based on this statutory provision, EPA believes that the proper focus of any air quality assessment for a pollution control project should be on visibility and any other relevant AQRV's for any class I areas that may be affected by the proposed project. Permitting authorities should notify Federal Land Managers where appropriate concerning pollution control projects which may adversely affect AQRV's in class I areas.

guidance. Therefore, the following descriptions expand upon the WEPCO rule in the scope of qualifying projects and in the specific elements inherent in the safeguards. These changes reflect the far more complicated task of evaluating pollution control projects at a wide variety of sources facing a myriad of Federal, State, and local clean air requirements.

Since the safeguards are an integral component of the exclusion, States must have the authority to impose the safeguards in approving an exclusion from major NSR under this policy. Thus, State or local permitting authorities in order to use this policy should provide statements to EPA describing and affirming the basis for its authority to impose these safeguards absent major NSR. Sources that obtain exclusions from permitting authorities that have not provided this affirmation of authority are at risk in seeking to rely on the exclusion issued by the permitting agency, because EPA may subsequently determine that the project does not qualify as a pollution control project under this policy.

A. Types of Projects Covered

1. Add-On Controls and Fuel Switches

In the WEPCO rulemaking, EPA found that both add-on emissions control projects and fuel switches to less-polluting fuels could be considered to be pollution control projects. For the purposes of today's guidance, EPA affirms that these types of projects are appropriate candidates for a case-by-case exclusion as well. These types of projects include:

- the installation of conventional and advanced flue gas desulfurization and sorbent injection for SO_2;

- electrostatic precipitators, baghouses, high efficiency multiclones, and scrubbers for particulate or other pollutants;

- flue gas recirculation, low-NO_x burners, selective non-catalytic reduction and selective catalytic reduction for NO_x; and

- regenerative thermal oxidizers (RTO), catalytic oxidizers, condensers, thermal incinerators, flares and carbon adsorbers for volatile organic compounds (VOC) and toxic air pollutants.

Projects undertaken to accommodate switching to an inherently less-polluting fuel such as natural gas can also

qualify for the exclusion. Any activity that is necessary to accommodate switching to a inherently less-polluting fuel is considered to be part of the pollution control project. In some instances, where the emissions unit's capability would otherwise be impaired as a result of the fuel switch, this may involve certain necessary changes to the pollution generating equipment (e.g., boiler) in order to maintain the normal operating capability of the unit at the time of the project.

2. Pollution Prevention Projects

It is EPA's policy to promote pollution prevention approaches and to remove regulatory barriers to sources seeking to develop and implement pollution prevention solutions to the extent allowed under the Act. For this reason, permitting authorities may also apply this exclusion to switches to inherently less-polluting raw materials and processes and certain other types of "pollution prevention" projects.[4] For instance, many VOC users will be making switches to water-based or powder-paint application systems as a strategy for meeting reasonably available control technology (RACT) or switching to a non-toxic VOC to comply with maximum achievable control technology (MACT) requirements.

Accordingly, under today's guidance, permitting authorities may consider excluding raw material substitutions, process changes and other pollution prevention strategies where the pollution control aspects of the project are clearly evident and will result in substantial emissions reductions per unit of output for one or more pollutants. In judging whether a pollution prevention project can be considered for exclusion as a pollution control project, permitting authorities may also consider as a relevant factor whether a project is being undertaken to bring a source into compliance with a MACT, RACT, or other Act requirement.

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[4]For purposes of this guidance, pollution prevention means any activity that through process changes, product reformulation or redesign, or substitution of less polluting raw materials, eliminates or reduces the release of air pollutants and other pollutants to the environment (including fugitive emissions) prior to recycling, treatment, or disposal; it does not mean recycling (other than certain "in-process recycling" practices), energy recovery, treatment, or disposal [see Pollution Prevention Act of 1990 section 6602(b) and section 6603(5)(A) and (B); see also "EPA Definition of 'Pollution Prevention,'" memorandum from F. Henry Habicht II, May 28, 1992].

Although EPA is supportive of pollution control and prevention projects and strategies, special care must be taken in classifying a project as a pollution control project and in evaluating a project under a pollution control project exclusion. Virtually every modernization or upgrade project at an existing industrial facility which reduces inputs and lowers unit costs has the concurrent effect of lowering an emissions rate per unit of fuel, raw material or output. Nevertheless, it is clear that these major capital investments in industrial equipment are the very types of projects that Congress intended to address in the new source modification provisions [see Wisconsin Electric Power Co. v. Reilly, 893 F.2d 901, 907-10 (7th Cir. 1990) (rejecting contention that utility life extension project was not a physical or operational change); Puerto Rican Cement Co., Inc. v. EPA, 889 F.2d 292, 296-98 (1st Cir. 1989) (NSR applies to modernization project that decreases emissions per unit of output, but increases economic efficiency such that utilization may increase and result in net increase in actual emissions)]. Likewise, the replacement of an existing emissions unit with a newer or different one (albeit more efficient and less polluting) or the reconstruction of an existing emissions unit would not qualify as a pollution control project. Adopting a policy that automatically excludes from NSR any project that, while lowering operating costs or improving performance, coincidentally lowers a unit's emissions rate, would improperly exclude almost all modifications to existing emissions units, including those that are likely to increase utilization and therefore result in overall higher levels of emissions.

In order to limit this exclusion to the subset of pollution prevention projects that will in fact lower annual emissions at a source, permitting authorities should not exclude as pollution control projects any pollution prevention project that can be reasonably expected to result in an increase in the utilization of the affected emissions unit(s). For example, projects which significantly increase capacity, decrease production costs, or improve product marketability can be expected to affect utilization patterns. With these changes, the environment may or may not see a reduction in overall source emissions; it depends on the source's operations after the change, which cannot be predicted with any certainty.[5] This is not to say that these

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[5]This is in marked contrast to the addition of pollution control equipment which typically does not, in EPA's experience, result in any increase in the source's utilization of the emission unit in question. In the few instances where this presumption is not true, the safeguards discussed in the next section should provide adequate environmental protections for

types of projects are necessarily subject to major NSR requirements, only that they should not be excluded as pollution control projects under this guidance. The EPA may consider different approaches to excluding pollution prevention projects from major NSR requirements in the upcoming NSR rulemaking. Under this guidance, however, permitting authorities should carefully review proposed pollution prevention projects to evaluate whether utilization of the source will increase as a result of the project.

Furthermore, permitting authorities should have the authority to monitor utilization of an affected emissions unit or source for a reasonable period of time subsequent to the project to verify what effect, if any, the project has on utilization. In cases where the project has clearly caused an increase in utilization, the permitting authority may need to reevaluate the basis for the original exclusion to verify that an exclusion is still appropriate and to ensure that all applicable safeguards are being met.

B. Safeguards

The following safeguards are necessary to assure that projects being considered for an exclusion qualify as environmentally beneficial pollution control projects and do not have air quality impacts which would preclude the exclusion. Consequently, a project that does not meet these safeguards does not qualify for an exclusion under this policy.

1. Environmentally-Beneficial Test

Projects that meet the definition of a pollution control project outlined above may nonetheless cause collateral emissions increases or have other adverse impacts. For instance, a large VOC incinerator, while substantially eliminating VOC emissions, may generate sizeable NO_x emissions well in excess of significance levels. To protect against these sorts of problems, EPA in the WEPCO rule provided for an assessment of the overall environmental impact of a project and the specific impact, if any, on air quality. The EPA believes that this safeguard is appropriate in this policy as well.

Unless information regarding a specific case indicates otherwise, the types of pollution control projects listed in III. A. 1. above can be presumed, by their nature, to be environmentally beneficial. This presumption arises from EPA's

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these additions of pollution control equipment.

experience that historically these are the very types of pollution controls applied to new and modified emissions units. The presumption does not apply, however, where there is reason to believe that 1) the controls will not be designed, operated or maintained in a manner consistent with standard and reasonable practices; or 2) collateral emissions increases have not been adequately addressed as discussed below.

In making a determination as to whether a project is environmentally beneficial, the permitting authority must consider the types and quantity of air pollutants emitted before and after the project, as well as other relevant environmental factors. While because of the case-by-case nature of projects it is not possible to list all factors which should be considered in any particular case, several concerns can be noted.

First, pollution control projects which result in an increase in non-targeted pollutants should be reviewed to determine that the collateral increase has been minimized and will not result in environmental harm. Minimization here does not mean that the permitting agency should conduct a BACT-type review or necessarily prescribe add-on control equipment to treat the collateral increase. Rather, minimization means that, within the physical configuration and operational standards usually associated with such a control device or strategy, the source has taken reasonable measures to keep any collateral increase to a minimum. For instance, the permitting authority could require that a low-NO_x burner project be subject to temperature and other appropriate combustion standards so that carbon monoxide (CO) emissions are kept to a minimum, but would not review the project for a CO catalyst or other add-on type options. In addition, a State's RACT or MACT rule may have explicitly considered measures for minimizing a collateral increase for a class or category of pollution control projects and requires a standard of best practices to minimize such collateral increases. In such cases, the need to minimize collateral increase from the covered class or category of pollution control projects can be presumed to have been adequately addressed in the rule.

In addition, a project which would result in an unacceptable increased risk due to the release of air toxics should not be considered environmentally beneficial. It is EPA's experience, however, that most projects undertaken to reduce emissions, especially add-on controls and fuel switches, result in concurrent reductions in air toxics. The EPA expects that many pollution control projects seeking an exclusion under this guidance will be for the purpose of complying with MACT requirements for reductions in air toxics. Consequently, unless

there is reason to believe otherwise, permitting agencies may presume that such projects by their nature will result in reduced risks from air toxics.

2. Additional Air Quality Impacts Assessments

(a) General

Nothing in the Act or EPA's implementing regulations would allow a permitting authority to approve a pollution control project resulting in an emissions increase that would cause or contribute to a violation of a NAAQS or PSD increment, or adversely impact visibility or other AQRV in a class I area [see, e.g., Act sections 110(a)(2)(C), 165, 169A(b), 173]. Accordingly, this guidance is not intended to allow any project to violate any of these air quality standards.

As discussed above, it is possible that a pollution control project--either through an increase in an emissions rate of a collateral pollutant or through a change in utilization--will cause an increase in actual emissions, which in turn could cause or contribute to a violation of a NAAQS or increment or adversely impact AQRV's. For this reason, in the WEPCO rule the EPA required sources to address whenever 1) the proposed change would result in a significant net increase in actual emissions of any criteria pollutant over levels used for that source in the most recent air quality impact analysis; and 2) the permitting authority has reason to believe that such an increase would cause or contribute to a violation of a NAAQS, increment or visibility limitation. If an air quality impact analysis indicates that the increase in emissions will cause or contribute to a violation of any ambient standard, PSD increment, or AQRV, the pollution control exclusion does not apply.

The EPA believes that this safeguard needs to be applied here as well. Thus, where a pollution control project will result in a significant increase in emissions and that increased level has not been previously analyzed for its air quality impact and raises the possibility of a NAAQS, increment, or AQRV violation, the permitting authority is to require the source to provide an air quality analysis sufficient to demonstrate the impact of the project. The EPA will not necessarily require that the increase be modeled, but the source must provide sufficient data to satisfy the permitting authority that the new levels of emissions will not cause a NAAQS or increment violation and will not adversely impact the AQRV's of nearby potentially affected class I areas.

In the case of nonattainment areas, the State or the source must provide offsetting emissions reductions for any significant increase in a nonattainment pollutant from the pollution control project. In other words, if a significant collateral increase of a nonattainment pollutant resulting from a pollution control project is not offset on at least a one-to-one ratio then the pollution control project would not qualify as environmentally beneficial.[6] However, rather than having to apply offsets on a case-by-case basis, States may consider adopting (as part of their attainment plans) specific control measures or strategies for the purpose of generating offsets to mitigate the projected collateral emissions increases from a class or category of pollution control projects.

(b) Determination of Increase in Emissions

The question of whether a proposed project will result in an emissions increase over pre-modification levels of actual emissions is both complicated and contentious. It is a question that has been debated by the New Source Review Reform Subcommittee of the Clean Air Act Advisory Committee and is expected to be revisited by EPA in the same upcoming rulemaking that will consider adopting a pollution control project exclusion. In the interim, EPA is adopting a simplified approach to determining whether a pollution control project will result in increased emissions.

The approach in this policy is premised on the fact that EPA does not expect the vast majority of these pollution control projects to change established utilization patterns at the source. As discussed in the previous section, it is EPA's experience that add-on controls do not impact utilization, and pollution prevention projects that could increase utilization may not be excluded under this guidance. Therefore, in most cases it will be very easy to calculate the emissions after the change: the product of the new emissions rate times the existing utilization rate. In the case of a pollution control project that collaterally increases a non-targeted pollutant, the actual increase (calculated using the new emissions rate and current utilization pattern) would need to be analyzed to determine its air quality impact.

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[6]Regardless of the severity of the classification of the nonattainment area, a one-to-one offset ratio will be considered sufficient under this policy to mitigate a collateral increase from a pollution control project. States may, however, require offset ratios that are greater than one-to-one.

The permitting authority may presume that projects meeting the definition outlined in section III(A)(1) will not change utilization patterns. However, the permitting authority is to reject this presumption where there is reason to believe that the project will result in debottlenecking, loadshifting to take advantage of the control equipment, or other meaningful increase in the use of the unit above current levels. Where the project will increase utilization and emissions, the associated emissions increases are calculated based on the post-modification potential to emit of the unit considering the application of the proposed controls. In such cases the permitting agency should consider the projected increase in emissions as collateral to the project and determine whether, notwithstanding the emissions increases, the project is still environmentally beneficial and meets all applicable safeguards.

In certain limited circumstances, a permitting agency may take action to impose federally-enforceable limits on the magnitude of a projected collateral emissions increase to ensure that all safeguards are met. For example, where the data used to assess a projected collateral emissions increase is questionable and there is reason to believe that emissions in excess of the projected increase would violate an applicable air quality standard or significantly exceed the quantity of offsets provided, restrictions on the magnitude of the collateral increase may be necessary to ensure compliance with the applicable safeguards.

IV. Procedural Safeguards

Because EPA has not yet promulgated regulations governing a generally applicable pollution control project exclusion from major NSR (other than for electric utilities), permitting authorities must consider and approve requests for an exclusion on a case-by-case basis, and the exclusion is not self-executing. Instead, sources must receive case-by-case approval from the permitting authority pursuant to a minor NSR permitting process, State nonapplicability determination or similar process. [Nothing in this guidance voids or creates an exclusion from any applicable minor source preconstruction review requirement in any SIP that has been approved pursuant to section 110(a)(2)(C) and 40 CFR 51.160-164.] This process should also provide that the application for the exclusion and the permitting agency's proposed decision thereon be subject to public notice and the opportunity for public and EPA written comment. In those limited cases where the applicable SIP already exempts a class or category of pollution controls project from the minor source permitting public notice and comment requirements, and where no collateral increases are expected (e.g., the installation of a

baghouse) and all otherwise applicable environmental safeguards are complied with, public notice and comment need not be provided for such projects. However, even in such circumstances, the permitting agency should provide advance notice to EPA when it applies this policy to provide an exclusion. For standard-wide applications to groups of sources (e.g., RACT or MACT), the notice may be provided to EPA at the time the permitting authority intends to issue a pollution control exclusion for the class or category of sources and thereafter notice need not be given to EPA on an individual basis for sources within the noticed group.

V. Emission Reduction Credits

In general, certain pollution control projects which have been approved for an exclusion from major NSR may result in emission reductions which can serve as NSR offsets or netting credits. All or part of the emission reductions equal to the difference between the pre-modification actual and post-modification potential emissions for the decreased pollutant may serve as credits provided that 1) the project will not result in a significant collateral increase in actual emissions of any criteria pollutant, 2) the project is still considered environmentally beneficial, and 3) all otherwise applicable criteria for the crediting of such reductions are met (e.g., quantifiable, surplus, permanent, and enforceable). Where an excluded pollution control project results in a significant collateral increase of a criteria pollutant, emissions reduction credits from the pollution control project for the controlled pollutant may still be granted provided, in addition to 2) and 3) above, the actual collateral increase is reduced below the applicable significance level, either through contemporaneous reductions at the source or external offsets. However, neither the exclusion from major NSR nor any credit (full or partial) for emission reductions should be granted by the permitting authority where the type or amount of the emissions increase which would result from the use of such credits would lessen the environmental benefit associated with the pollution control project to the point where the project would not have initially qualified for an exclusion.

IV. Illustrative Examples

The following examples illustrate some of the guiding principles and safeguards discussed above in reviewing proposed pollution control projects for an exclusion from major NSR.

Example 1

PROJECT DESCRIPTION: A chemical manufacturing facility in an attainment area for all pollutants is proposing to install a RTO to reduce VOC emissions (including emissions of some hazardous pollutants) at the plant by about 3000 tons per year (tpy). The emissions reductions from the RTO are currently voluntary, but may be necessary in the future for title III MACT compliance. Although the RTO has been designed to minimize NO_x emissions, it will produce 200 tpy of new NO_x emissions due to the unique composition of the emissions stream. There is no information about the project to rebut a presumption that the project will not change utilization of the source. Aside from the NO_x increase there are no other environmental impacts known to be associated with the project.

EVALUATION: As a qualifying add-on control device, the project may be considered a pollution control project and may be considered for an exclusion. The permitting agency should: 1) verify that the NO_x increase has been minimized to the extent practicable, 2) confirm (through modeling or other appropriate means) that the actual significant increase in NO_x emissions does not violate the applicable NAAQS,[7] PSD increment, or adversely impact any Class I area AQRV, and 3) apply all otherwise applicable SIP and minor source permitting requirements, including opportunity for public notice and comment.

Example 2

PROJECT DESCRIPTION: A source proposes to replace an existing coal-fired boiler with a gas-fired turbine as part of a cogeneration project. The new turbine is an exact replacement for the energy needs supplied by the existing boiler and will emit less of each pollutant on an hourly basis than the boiler did.

EVALUATION: The replacement of an existing emissions unit with a new unit (albeit more efficient and less polluting) does not qualify for an exclusion as a pollution control project. The company can, however, use any otherwise applicable netting credits from the removal of the existing boiler to seek to net the new unit out of major NSR.

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[7]If the source were located in an area in which nonattainment NSR applied to NO_x emissions increases, 200 tons of NO_x offset credits would be required for the project to be eligible for an exclusion.

Example 3

PROJECT DESCRIPTION: A source plans to physically renovate and upgrade an existing process line by making certain changes to the existing process, including extensive modifications to emissions units. Following the changes, the source will expand production and manufacture and market a new product line. The project will cause an increase in the economic efficiency of the line. The renovated line will also be less polluting on a per-product basis than the original configuration.

EVALUATION: The change is not eligible for an exclusion as a pollution control project. On balance, the project does not have clearly evident pollution control aspects, and the resultant decrease in the per-product emissions rate (or factor) is incidental to the project. The project is a physical change or change in the method of operation that will increase efficiency and productivity.

Example 4

PROJECT DESCRIPTION: In response to the phaseout of chlorofluorocarbons (CFC) under title VI of the Act, a major source is proposing to substitute a less ozone-depleting substance (e.g., HCFC-141b) for one it currently uses that has a greater ozone depleting potential (e.g., CFC-11). A larger amount of the less-ozone depleting substance will have to be used. No other changes are proposed.

EVALUATION: The project may be considered a pollution control project and may be considered for an exclusion. The permitting agency should verify that 1) actual annual emissions of HCFC-141b after the proposed switch will cause less stratospheric ozone depletion than current annual emissions of CFC-11; 2) the proposed switch will not change utilization patterns or increase emissions of any other pollutant which would impact a NAAQS, PSD increment, or AQRV and will not cause any cross-media harm, including any unacceptable increased risk associated with toxic air pollutants; and 3) apply all otherwise applicable SIP and minor source permitting requirements, including opportunity for public notice and comment.

Example 5

PROJECT DESCRIPTION: An existing landfill proposes to install either flares or energy recovery equipment [i.e., turbines or internal combustion (IC) engines]. The reductions from the project are estimated at over 1000 tpy of VOC and are currently not necessary to meet Act requirements, but may be necessary some time in the future. In case A the project is the replacement of an existing flare or energy system and no increase in NO_x emissions will occur. In case B, the equipment is a first time installation and will result in a 100 tpy increase in NO_x. In case C, the equipment is an addition to existing equipment which will accommodate additional landfill gas (resulting from increased gas generation and/or capture consistent with the current permitted limits for growth at the landfill) and will result in a 50 tpy increase in NO_x.

EVALUATION: Projects A, B, and C may be considered pollution control projects and may be considered for an exclusion; however, in cases B and C, if the landfill is located in an area required to satisfy nonattainment NSR for NO_x emissions, the source would be required to obtain NO_x offsets at a ratio of at least 1:1 for the project to be considered for an exclusion. [NOTE: VOC-NO_x netting and trading for NSR purposes may be discussed in the upcoming NSR rulemaking, but it is beyond the scope of this guidance.] Although neither turbines or IC engines are listed in section III.A.1 as add-on control devices and would normally not be considered pollution control projects, in this specific application they serve the same function as a flare, namely to reduce VOC emissions at the landfill with the added incidental benefit of producing useful energy in the process.[8]

The permitting agency should: 1) verify that the NO_x increase has been minimized to the extent practicable; 2) confirm

---

[8]The production of energy here is incidental to the project and is not a factor in qualifying the project for an exclusion as a pollution control project. In addition, any supplemental or co-firing of non-landfill gas fuels (e.g., natural gas, oil) would disqualify the project from being considered a pollution control project. The fuels would be used to maximize any economic benefit from the project and not for the purpose of pollution control at the landfill. However, the use of an alternative fuel solely as a backup fuel to be used only during brief and infrequent start-up or emergency situations would not necessarily disqualify an energy recovery project from being considered a pollution control project.

(through modeling or other appropriate means) that the actual significant increase in NO_x emissions will not violate the applicable NAAQS, PSD increment, or adversely impact any AQRV; and 3) apply all otherwise applicable SIP and minor source and, as noted above, in cases B and C ensures that NO_x offsets are provided in an area in which nonattainment review applies to NO_x emissions increases. permitting requirements, including opportunity for public notice and comment.

S/L Directors, BC

FEB 22 1994

Rich H

No At

February 7, 1994

NOTE TO STEVE ROTHBLATT

Steve, you may be aware that as part of the NSR reform effort, we are currently developing guidance regarding NSR applicability to pollution control and prevention projects. We expect to issue a policy memo in the next few months with a rulemaking proposal on the issue to follow early next year. A copy of the current draft pollution control project memorandum is attached for your reference.

Pending the rulemaking, EPA's current policy is to review proposed pollution control projects to determine whether they should be excluded from NSR based on a case-by-case assessment of the net emissions and overall environmental impact of the project (see WEPCO rulemaking). Pollution control projects that are environmentally beneficial and meet certain safeguards may be excluded.

As a result of the NSR Reform effort, we understand that Eli Lilly has raised the issue of an NSR exclusion for their regenerative thermal oxidizer (RTO) project at their Tippecane Laboratories in Shadeland, Indiana with Region V and the Indiana Department of Environmental Management (IDEM). Based upon our understanding of the facts, we feel that it meets all the qualifications for an exclusion from NSR as a pollution control project under the terms discussed in our draft memorandum as well as the WEPCO rule. Consequently, we would encourage the Region to work with IDEM and the source in evaluating the project for an NSR exclusion.

Our position is to encourage and support pollution control projects whenever possible and issue case specific exclusions where appropriate. Your effort with GM last year was one example; another is outlined in the attached RO VI memo.

Please give me a call if you would like to discuss. We would be glad to provide assistance.

Ed Lillis 2/7

ATTACHMENTS

cc: Lydia Wegman w/a
Kent Berry w/a
Dave Kee w/a
David Solomon w/a

OPTIONAL FORM 99 (7-90)

FAX TRANSMITTAL

# of pages ▶ 1

To [redacted]	From David Solomon
Dept./Agency RO V	Phone # (919) 541-5375
Fax #	Fax #

NSN 7540-01-317-7368 5099-101 GENERAL SERVICES ADMINISTRATION

OhioEPA
State of Ohio Environmental Protection Agency
P.O. Box 1049, 1800 WaterMark Dr.
Columbus, Ohio 43266-0149
(614) 644-3020 Fax (614) 644-2329

Richard F. Celeste
Governor

M O R A N D U M

To: New Source Review Contacts

From: Bob Hodanbosi, AQM&P

Subject: New Guidance on Increment Consumption/Ambient Impact

Date: January 15,

Attached is a guidance document recently developed to assist n the discussions with PSD permit applicants.

It explains the background behind the allowable ambient impact under the PSD regulations and the purpose for the increment consumption policy. In each particular case, the determination of increment consumption would be made during the review process.

This new document should be added to your New Source Review Guidebook as section B2h.

RECEIVED
JAN 17 1991
OHIO EPA/CDO

BH/MP/mmc

attachment

Guideline for Consumption of Air Quality Increment or Ambient **Impact**

Issue: Many sources ask how much increment can be used under the Prevention of Significant Deterioration (PSD) regulations or what ambient impact is acceptable

Response: The PSD regulations are applicable to major sources or major modifications and specify how much "clean air" can be consumed by a new source. The increments are permanent limitations on air quality degradation for areas cleaner than the ambient air quality standards.

Soon after Ohio EPA received Delegation of Authority to review PSD applications and issue PSD permits, it was recognized that a uniform program for PSD increment consumption had to be formulated. The PSD regulations allow for the orderly consumption of increment by prohibiting the consumption of increment in one state caused by a source in another state by greater than one-half the available increment.

Consistent with the PSD regulations, Ohio EPA informs applicants that whether the source impacts an interstate area or not, the maximum ambient impact from a source would be one-half the available increment. This will prevent one source from building in an area, consuming tl entire increment, and effectively preventing any future new sourc growth.

There are exceptions to the implementation of the increment consumption program. First, if the maximum impact of a source occurs at the plant boundary due to downwash conditions, greater than one-half the increment may be consumed. Since the maximum impact is at the plant property, in all likelihood, the facility would be detrimentally affected by the increment consumption. Secondly, the Director may also decide that it is in the best interest of the state to allow a greater consumption of increment.

Since major sources in attainment areas are restricted to certain impacts, for the protection of air quality, minor sources in attainment areas or sources in nonattainment areas are required to meet the same ambient air quality impacts. This program allows for the protection of air quality and continued economic growth.

TABLE 3

NATIONAL AMBIENT AIR QUALITY STANDARDS (NAAQS), PSD INCREMENTS, SIGNIFICANT EMISSION RATES, SIGNIFICANT IMPACT INCREMENTS, AND MONITORING DE MINIMIS CONCENTRATIONS

PRECONSTRUCTION AMBIENT AIR

Pollutant	Averaging Period	NAAQS (µg/m3) Primary	NAAQS (µg/m3) Secondary	PSD Increments (µg/m3) Class I	PSD Increments (µg/m3) Class II	PSD Increments (µg/m3) Class III	Significant Emission Rates (tons/year)	Significant Impact Increments (µg/m3)	Monitoring de Minimis Concentrations (µg/m3)
Total suspended particulates	Annual (Geometric mean)	75	60/a	5	19	37	25		
	24-hour	260/b	150/b	10/b	37/b	75/b		5	10
Particulate matter less than 10 µ	Annual (Arithmetic mean)	50					15		
	24-hour	150						5	10
Sulfur dioxide	Annual (Arithmetic mean)	80		2	20	40	40	1	
	24-hour	365/b		5/b	91/b	182/b		5	13
	3-hour		1300/b	25/b	512/b	700/b		25	
Nitrogen dioxide	Annual (Arithmetic mean)	100	/c	2.5	25	50	40		14
Ozone	1-hour	235/d	/c				40/e		/f
Carbon monoxide	8-hour	10,000/b	/c	--	--		100	500	575
	1-hour	40,000/b	/c	--	--			2000	--
Lead	Calendar quarter	1.5	/c				0.6		0.19
Total reduced sulfur (TRS)	1-hour						10		10

a/Guide, not a formal enforceable standard.
b/Concentration not to be exceeded more than once per year.
c/Same as primary NAAQS.
d/Expected number of days in which one or more hourly ozone concentrations exceed this value must be greater than 1.
e/Emissions of volatile organic compounds.
f/Increase in volatile organic compounds of more than 100 tons/year.
g/Twenty-four-hour average.

DP&L(1)/122mh

ENTIRE STATE OHIO 5 CLASS

DRAFT

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SEE ALSO
4.39

September 18, 1989

MEMORANDUM

SUBJECT: Request for Clarification of Policy Regarding the "Net Emissions Increase"

FROM: John Calcagni, Director
Air Quality Management Division (MD-15)

TO: William B. Hathaway, Director
Air, Pesticides, and Toxics Division (6T)

This is in response to your August 10, 1989 memorandum regarding guidance on several issues related to the calculation of "net emissions increase" (as defined in 40 CFR 52.21(b)(3)(i)) for prevention of significant deterioration (PSD) applicability purposes. These issues arose from a PSD pre-application package submitted to Region VI by Conoco Inc. of Westlake, Louisiana.

As was discussed in an August 17, 1989 conference call between Region VI staff and members of the New Source Review Section, our response provides general guidance on the four basic netting questions raised in your memorandum, as opposed to a more detailed response specific to the Conoco application.

Question 1:

Which of the following approaches is correct for determining if a contemporaneous net emissions increase has occurred at an existing major source?

A. Not including contemporaneous emissions unless the project emissions exceed PSD significance levels for a pollutant.

B. Using a literal interpretation of the definition of "net emissions increase" as contained in 40 CFR 52.21(b)(3)(i) which suggests that, even if the project's emissions do not exceed the PSD significance levels, a series of less than significant changes would still be accumulated.

Response:

Although the definition of "net emissions increase" could be interpreted differently, the Environmental Protection Agency's (EPA's) historic policy has been not to consider accumulated emissions from a series of small (i.e., less than significant) emissions increases if the emissions increase from the proposed modification to the source is, standing alone without regard to any

decreases, less than significant. In other words, the netting calculus

(the summation of contemporaneous emissions increases and decreases) is not triggered unless there will be a significant emissions increase associated with the proposed modification. This policy was discussed in detail in a 1983 EPA memorandum (copy attached) titled "Net Emission Increases Under PSD." In October 1988 the Policy and Guidance Section of the Stationary Source Compliance Division (SSCD) sent a memorandum (copy attached) to Region V restating the policy and indicating that it applied only to applicability determinations made under PSD and did not apply to nonattainment rules. The memorandum also indicated that SSCD was reconsidering the policy as it applies to PSD. We have, however, discussed this matter with SSCD and understand that there are no plans to revise the policy.

This office has reviewed the considerations (as discussed in the 1983 memorandum) which led to the policy and continue to find them to be reasonable and appropriate. For example, it would not be sensible to subject a small increase (e.g., 2 tons per year [tpy]) to a full PSD review because of an unrelated 39 tons per year increase 3 years earlier. The PSD reviews of such small emissions could place a significant resource burden on both applicants and review agencies and would likely result in minimal, if any, emissions reductions or air quality benefits from the application of BACT. Conse- quently, I reaffirm that EPA's current policy is not to aggregate less than significant increases at a major source when the emissions increase from a proposed modification is less than significant. Of course, attempts by applicants to avoid PSD review by splitting a modification into two or more minor modifications constitutes circumvention of the PSD requirements. Two or more related minor changes over a short period of time should be studied for possible circumvention.

Question 2:

Once PSD review is triggered for one pollutant, does the triggering mechanism (i.e., as described in question 1) remain the same for other pollutants or is the net contemporaneous emissions increase for these other pollutants compared to the PSD significance levels? In other words, if PSD review is triggered for one pollutant, is the source then required to consider all contemporaneous emissions changes for the other pollutants when determining applicability, even if new emissions from the proposed project will be less than significant?

Response:

No. The criteria used to determine if a significant net emissions increase has occurred from a proposed modification at an existing major source are applied on a pollutant-by-pollutant basis.

For example, a major source experienced insignificant increases of NOx (30 tpy) and SO2 (15 tpy) 2 years ago, and a decrease of SO2 (50 tpy) 3 years ago. The source now proposes to add a new process unit with an associated emissions increase of 35 tpy NOx and 80 tpy SO2. For SO2, the proposed 80 tpy increase from the modification by itself (before any netting) is significant,

so we then determine the contemporaneous net emissions change, the algebraic sum of (-50)+(15)+(80), which equals +45 tpy. Therefore, the proposed modification is major and a PSD review for SO2 is required. However, the NOx increase from the proposed modification is by itself less than significant. Consequently, netting is not performed for NOx even though the modification is major for SO2.

Question 3:

Is the approach of comparing new, allowable emissions to old, actual emissions still appropriate for determining PSD applicability?

Response:

Under the PSD regulations, whether a physical change or change in the method of operation at a source will result in a "net emissions increase"

requires a comparison of the "actual emissions" of the source before and after the change. For an existing emissions unit at a source, "actual emissions" before the change equal the average rate in tons per year at which the unit actually emitted the pollutant during the 2-year period (or more representa- tive period) which precedes the change [see 40 CFR 52.21(b)(21)(ii)]. Where the change will affect the normal operations of an existing emissions unit (as in the case of a change which could result in increased use of the unit), "actual emissions" after the change must be assumed to be equal to "potential to emit." The PSD regulations are quite clear regarding such circumstances [40 CFR 52.21(b)(21)(iv)]:

> For any emissions unit that has not yet begun normal operations on the particular date, actual emissions shall equal the potential to emit of the unit on that date. (Emphasis added.)

Where "allowable emissions" are the same as or less than the "potential to emit" for an emissions unit, "allowable emissions" may be used to define the "actual emissions" of that unit after the change. Consequently, for determining PSD applicability, the comparison of prior "actual" versus new "potential" emissions (or "allowable" where appropriate) is the correct methodology to use.

The comparison of prior "actual" to future "potential" emissions is made on a unit-by-unit basis for all emissions units at the source that will be affected by the change. It is done for the emissions unit(s) undergoing the physical change or change in the method of operation and also for any other units at which normal operations could be affected by the change at the source. This, for example, includes a review for possible emissions increases at process-related emissions units due to a physical change which removed a bottleneck at only one of the units.

Question 4:

When determining contemporaneous increases and decreases, are all emissions points at the source reviewed, or only those emissions points that

have had emissions changes incorporated into State permits in terms of actual emissions changes at the beginning and end of the contemporaneous period to determine the contemporaneous emissions changes?

Response:

Generally all emissions points at the source (including fugitive emissions where applicable) are reviewed for emissions changes, including those points with emissions changes that have not been incorporated into permits. The PSD regulations at 40 CFR 52.21(b)(3)(i)(b) require that "any other increases and decreases in actual emissions at the source that are contemporaneous with the particular change and are otherwise creditable" be included in the calculation of "net emissions increase." (Emphasis added.)

In regard to emissions changes incorporated into permits, the regulations at 40 CFR 52.21(b)(3)(iii) provide that a contemporaneous increase or decrease (to the extent the decrease is federally enforceable) is creditable only if the relevant reviewing authority has not relied on it in issuing a PSD permit for the source, and the permit is still in effect when the increase in actual emissions from the particular change occurs. A reviewing authority relies on an increase or decrease when, after taking the increase or decrease into account, it concludes that the proposed project would not cause or contribute to a violation of an increment or ambient standard. In other words, an emissions change at an emissions point which was considered in the issuance of a PSD permit for the source is not available to be used in subsequent netting calculations. For example, an emission change incorporated in a source's PSD permit (State or Federal) would not be available to be used as a contemporaneous increase or decrease in a subsequent netting calculation.

On the other hand, where an emissions change was not relied upon in

issuing a PSD permit for the source, the regulations make no distinction between an emissions point with an emissions change incorporated into a State permit and any other emissions point at the source when defining an otherwise creditable contemporaneous change. Consequently, except for emissions changes considered in issuing a PSD permit, all emissions points at the source are reviewed in terms of actual emissions changes to determine the contemporaneous emissions changes at a source, including those emissions points that have not had emissions changes incorporated into State permits. Although emissions changes incorporated into State permits do not affect which emissions points must be considered, conditions in State permits (if federally enforceable) may be used to define an emissions unit's "allowable emissions."

If you have any questions in regard to this matter, please contact David Solomon of the New Source Review Section at FTS 629-5375.

Attachments

cc: NSR Contacts

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SEE ALSO
4.42

October 28,1988

MEMORANDUM

SUBJECT: Review of De Minimis Emissions - Sanctions

FROM: Ronald Shafer, Chief
Policy and Guidance Section
Stationary Source Compliance Division

TO: Ron Van Mersbergen
Air and Radiation Branch (5AR-26)
Region V

The purpose of this memorandum is to comment on your draft reply to the State of Illinois explaining SSCD's January 5, 1983 applicability determination. The 1983 memorandum addressed the question of whether nonsignificant (de minimis) net emission increases that accumulate over time will trigger PSD reviews when the total net emissions exceed significance levels.

The 1983 memorandum stated that even though the preamble to the PSD regulations addressed the question of accumulation of emissions, the PSD regulations themselves did not. SSCD decided that those changes which occur over time (within a contemporaneous time frame, that is, five years) and whose emissions when reviewed as distinct entities are not significant, should not be combined and would not trigger PSD review (PSD permit issuance and imposition of BACT controls) when significance levels are reached. This was a policy decision based on concerns about the reasonableness of requiring permit- ting and imposition of controls for the most recent small increase in emissions. These policy considerations apply only to the permitting requirements for PSD and NSR and do not apply to the rules governing sanctions (40 CFR 52.24).

It is very important to note that the 1983 memorandum affirmed that even though individual de minimis increases do not accumulate to trigger a PSD review, they do consume PSD increment and ambient air quality must be protected. Likewise, in nonattainment areas, de minimis net emission increases must be aggregated and considered in evaluating air quality impacts so the NAAQS will be attained. Under the nonattainment rules, aggregated de minimis emissions will trigger sanctions when significance levels are reached. Emissions are aggregated as follows: any emissions increase as a result of a physical change or change in the method of operation must be evaluated to see if the cumulative net emissions increase over the past five years is significant.

We are now reconsidering the January 5, 1983 applicability determination and intend to write to you later about this. If you have any comments or further questions, please call me or Myra Cypser on my staff (382-2872).

cc: Judy Katz, OECM

Greg Foote, OGC
Dennis Crumpler, AQMD
NSR contacts, Regions I-X

June 3, 1983 Net Emission Increase Under PSD 4.24

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4.24

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

MEMORANDUM

SUBJECT: Net Emission Increase under PSD

FROM: Sheldon Meyers, Director
Office of Air Quality Planning and Standards

TO: David PI Howekamp, Director
Air Management Division - Region IX

This is in response to your memo dated May 3, 1983 to Kathleen M. Bennett concerning net emission increases under PSD. I have looked into the question of inconsistency in interpretation of the de minimus provisions of the PSD relations as raised in your memorandum, and have concluded that the interpretation made by the Stationary Source Compliance Division is the most practical.

The issue, as I understand it, is whether sources and control agencies need to aggregate small changes (i.e., those below de minimus levels) which occur over time so that once the cumulative effect of the changes exceeds de minimus levels, PSD is triggered. The preamble to the PSD regulations implied that this aggregation would be required. However, the Agency has maintained since 1981 that no such aggregation is required. This interpretation was first articulated in a memo from SSCD (then DSSE) to Region VII dated January 22, 1981, and has been reiterated in memoranda to Region IX and X since then. The SSCD interpretation was concurred in by the Office of General Counsel (Peter Wyckoff) as legally supportable since the regulations themselves are not clear. The policy considerations

leading to this interpretation were:

(a) aggregation could impose a significant resource burden on sources which might never become subject to PSD.

(b) aggregation would only require installation of BACT level controls on the last piece of equipment which triggered the review, with a minimum air quality benefit, and

(c) air quality would be protected since these changes would consume increment in any event.

In conclusion, I feel that the interpretation made by SSCD to be the most reasonable. However, I recognize that a clarifying amendment to the PSD regulation is advisable and will include it as part of the next set of proposed changes to the PSD regulations. If you would like to discuss this further, please contact me.

cc: Darryl Tyler
Ed. Reich
Peter Wyckoff

June 14, 1994

MEMORANDUM

SUBJECT: Offsets Required Prior to Permit Issuance

FROM: John S. Seitz, Director
Office of Air Quality Planning and Standards (MD-10)

TO: Director, Air, Pesticides, and Toxics
Management Division,
Regions I and IV
Director, Air and Waste Management Division,
Region II
Director, Air, Radiation and Toxics Division,
Region III
Director, Air and Radiation Division,
Region V
Director, Air, Pesticides, and Toxics Division,
Region VI
Director, Air and Toxics Division,
Regions VII, VIII, IX, and X

This memorandum and Attachment A respond to the February 2, 1994 memorandum (Attachment B) from David Howekamp, Region IX, requesting a statement of the Environmental Protection Agency's (EPA's) position on the timing of offset requirements for permitting construction and operation of new or modified major sources under section 173 of the Clean Air Act. Attachment A provides a full discussion of the issues and current EPA policy. As discussed in Attachment A, in most cases offsets must be federally enforceable before a permit to construct and operate may be issued, although the offsetting emissions reductions need not be achieved until the permitted source commences operation. However, because of uncertainties surrounding NO_x reasonably available control technology requirements, EPA established an alternative approach which allowed sources to wait until commencement of operation to secure

federally-enforceable NO_x offsets, rather than require such offsets prior to issuance of a construction permit. See the Nitrogen Oxides Supplement to the General Preamble for Implementation of Title I ("NO_x Supplement") (57 FR 55620, Nov. 25, 1992).

The guidance in Attachment A elaborates on EPA's statements in the NO_x Supplement which enables States to issue new source review construction permits prior to the acquisition of federally-enforceable NO_x offsets. While EPA's guidance continues to allow for the acquisition of federally-enforceable NO_x offsets after permit issuance, it allows such delay primarily in cases where the Federal enforceability of a NO_x offset hinges on EPA approval of a State implementation plan (SIP) revision. Case-by-case situations may also be identified in the future where such a delay would be justified. In all other circumstances, including the draft permit identified in David Howekamp's memorandum, federally-enforceable NO_x offsets must be secured prior to issuance of a construction permit.

Today's policy does not supersede existing Federal or State regulations or approved SIP's. The policy set out in Attachment A is intended solely as guidance and does not represent final Agency action. The policy statement is not ripe for judicial review. Moreover, it is not intended, nor can it be relied upon, to create any rights enforceable by any party in litigation with the United States. This policy is not binding on EPA or any regulated parties, and may be challenged in judicial review of final Agency action for which it is relevant. The EPA also may change this guidance at any time without public notice.

The Regional Offices should immediately distribute this memorandum with the attachments to States within their jurisdiction in order to provide notice of EPA's clarified NO_x offset policy. Questions concerning specific issues should be directed to the appropriate EPA Regional Office. Regional Office staff may contact Dan deRoeck of the New Source Review Section at (919) 541-5593, if they have any questions.

Attachments

cc: Air Branch Chief, Regions I-X

bcc: NSR Contacts
J. Martel, OGC
L. Wegman
E. Lillis
T. Helms
D. Solomon
D. deRoeck

ATTACHMENT A

DISCUSSION ON THE TIMING OF NITROGEN OXIDES (NO_x)
OFFSET REQUIREMENTS FOR PERMITTING NEW AND MODIFIED MAJOR SOURCES
UNDER SECTION 173 OF THE CLEAN AIR ACT(ACT)

Region IX has requested a statement of the Environmental Protection Agency's (EPA's) policy on the timing of offset requirements for construction permits issued under section 173 of the Act. The Yolo-Solano Air Quality Management District (Yolo-Solano AQMD) is challenging Region IX's position in connection with a permit to construct and operate a paper recycling plant that MacMillan-Bloedel, Haindl Papier, and HIPP Engineering are proposing to build. According to Region IX, this facility will have the potential to emit major amounts of NO_x) and volatile organic compounds (VOC). Region IX further indicated that the Yolo-Solano AQMD and the California Air Resources Board are contesting Region IX's position that specific offsets must be federally enforceable before the permit may be issued and actually must be achieved by the time the source commences operation. This attachment clarifies current Agency policy concerning the timing of offsets.

The EPA's general policy is that emissions offsets for a major new or modified stationary source must be federally enforceable prior to the issuance of a part D new source review (NSR) construction permit. This position is consistent with congressional intent as reflected in the changes made to the Act under the 1990 Amendments. Nevertheless, on November 25, 1992, EPA published special guidance for obtaining NO_x offsets in the NO_x Supplement to the General Preamble for Implementation of Title I ("NO_x Supplement") [see 57 FR 55620 at 55624 (Nov. 25, 1992)]. Today's policy statement elaborates that the offset policy provided in the NO_x Supplement is generally limited to situations where States are generating offsets through State implementation plan (SIP) measures that EPA must process as a SIP submission in order for the measures to be fully enforceable by EPA. This policy may also apply in other specific circumstances for NOx offsets, on a case-by-case basis. The EPA further intends to solicit comment on this policy in its forthcoming rulemaking implementing changes to the NSR program under the 1990 Amendments.

In the 1990 Amendments, Congress added or changed statutory language in section 173 in three places regarding the timing of offsets. In section 173(a)(1)(A), Congress added language to specify that the permitting authority may issue a permit to construct and operate if it determines that by the time the source is to commence operation "offsetting emissions reductions have been obtained." At the end of section 173(a)(1), Congress changed language to explicitly provide that the offsets required as a precondition of permit issuance under paragraph (a)(1) "shall be federally

enforceable before such permit may be issued." This clarified prior law which stated that the offsets must be "legally binding" before the permit may be issued. Finally, in new section 173(c)(1), Congress specified that offsetting emission reductions "shall be, by the time a new or modified source commences operation, in effect and enforceable."

The EPA had actually proposed to delete the federally- enforceable requirement pursuant to a settlement in Chemical Manufacturers' Association (CMA) v. EPA, (No. 79-1112) (D.C. Cir.); 48 FR 38742 (August 25, 1983) (proposal pursuant to "CMA Exhibit A"). While EPA ultimately rejected deleting the federally-enforceable requirement, 54 FR 27274 (June 28, 1989), Congress had reason to clarify this issue and codify its position.

The EPA's fundamental position, that offsets for nonattainment pollutants must be federally enforceable before a construction permit may be issued, pre-dates the 1990 Amendments; the Agency understands that most States have incorporated this requirement into their nonattainment NSR programs [see 40 CFR 51.165(a)(3)(ii)(E) and Appendix S]. As explained in the General Preamble for the Implementation of Title I:

> The 1990 Amendments clarified the existing requirement by requiring that the offsets be federally enforceable before permit issuance [see revised section 173(a)]. Accordingly, while it is possible for a State to issue a permit to construct once sufficient emissions offsets have been identified and made federally enforceable (generally through a permit condition made to the permit of the existing source), the State must also ensure that the required emissions reductions actually occur no later than the date on which the new source or modified source would commence operation.

[see 57 FR 13498, 13553 (April 16, 1992)].

The requirement that offsets be federally enforceable is based on sound policy, as well. Federal enforceability for the source making the offsetting reductions ensures that the Agency may hold the reducing source responsible in an enforcement action for failure to make the reductions. It further ensures that the criteria for fully-creditable offsets (quantifiable, surplus, permanent) are addressed before construction may commence. After commencement of construction, the equity considerations shift in favor of the new or modified source needing offsets. Once constructed, it may become more difficult for EPA or a State to prevent that source from commencing operation even though the offsetting reductions are not yet identified, quantified, and secured with federally-enforceable restrictions.

As a result of new requirements established by the 1990 Amendments, NO_x emissions must be regulated similarly to VOC as precursors to ozone under the nonattainment NSR requirements. That is, sources of NO_x locating in a nonattainment area for ozone must meet the part D nonattainment permit requirements, including the applicable requirements for offsets. On

November 25, 1992, EPA published special guidance for obtaining NO_x offsets in the NO_x Supplement. There, the Agency explained that some sources had expressed concern that the delay in adopting rules for reasonably available control technology (RACT) applicable to utility boilers and other stationary sources might make efforts to locate offsets more difficult for new or modified major sources needing offsets. This was purportedly because uncertainty over the eventual NO_x RACT limit could lead existing NO_x sources to retain NO_x emissions reductions for their own use.

The EPA took the position that in order to ameliorate this situation, it would approve NSR SIP revisions that require the acquisition of federally-enforceable NO_x offsets, but allow sources to delay their acquisition up to the time that the new or modified source commences operation, thus enabling sources to wait out any initial uncertainties regarding the NO_x emissions reduction market. The EPA stated that it would not object if States were to issue permits to sources on the basis of an enforceable commitment to secure federally-enforceable offsets by the time the source is ready to commence operation. However, the NO_x Supplement further stated that construction permits would have to contain "federally-enforceable provisions that expressly prohibit the commencement of any actual operations until such time as the necessary offsetting emissions reductions have been identified, approved, and secured with appropriate permit restrictions on the source providing the offset." Finally, EPA intended in the NO_x Supplement that construction permits could be issued based on a commitment to secure offsets before commencement of operation only for NO_x offsets.

The EPA is concerned both about the consistency of this approach with Act requirements, and the potential abuse of it in practice. As discussed above, once a new or modified major source has completed construction and is ready to operate, it may be very difficult for reasons of equity for EPA or a State indefinitely to prevent the source from operating pending acquisition of sufficient creditable offsets that have been secured with federally-enforceable restrictions. In general, therefore, EPA does not believe it is appropriate to allow a construction permit to be issued until creditable offsets are identified, quantified, and made federally enforceable.

Still, EPA understands that in particular circumstances States have been prompted to adopt SIP measures to generate NO_x offsets, and that the only step remaining to ensure that EPA can enforce the measures is EPA approval of the SIP submission. In such circumstances, creditable offsets have been identified, quantified, adopted as a matter of State law, and submitted to EPA, but the EPA administrative process to approve the measure may not be completed by the time the source seeks to commence construction. This was precisely the situation recently in a case where the State of Maine adopted an extended enhanced vehicle inspection/maintenance program to generate NO_x offsets that would be used, in part, to provide offsets for new construction (see letter from Linda Murphy, EPA Region I, to Dennis Keschl, Maine Department of Environmental Protection, dated March 1, 1994). In such cases, it may not be feasible for EPA's administrative process needed to make the offsets federally enforceable to be completed within the ordinary timeframe for issuing a construction permit. Thus, EPA believes it is appropriate in these cases to retain the policy announced in the NO_x Supplement that a construction permit may be issued on the basis of a federally-enforceable commitment that the

source may not commence operation until the offsets are made federally enforceable by EPA approval of the SIP measure. That is, the construction permit would have to contain a federally-enforceable condition that expressly prohibits the commencement of any actual operations pending EPA approval of the SIP measure.

The EPA recognizes that there may be circumstances other than SIP measures awaiting EPA approval where sufficient creditable offsets have been identified and certain administrative obstacles remain to making the offsets federally enforceable. The EPA believes that it may be appropriate, on a case-by-case basis, to extend similar treatment to these sources, allowing them to obtain a construction permit that contains an explicit condition prohibiting operations until the offsets are made federally enforceable.

In the case of the Yolo-Solano AQMD's draft permit for the recycling plant, however, there is no pending SIP revision awaiting EPA approval that would generate federally-enforceable NO_x offsets. Indeed, apparently offsets have not yet even been identified. Further, the draft permit appears not to meet even the minimal guidance calling for a federally-enforceable condition prohibiting the commencement of operation until federally-enforceable offsets are actually accomplished, as set forth in the NO_x Supplement. The draft permit contains only a condition that, "[p]rior to initial reliability testing, [the source] shall submit to the District evidence of mitigation of all oxides of nitrogen and volatile organic compounds emitted." In light of the noted deficiencies in the Yolo-Solano AQMD's draft permit, the issuance of the final construction permit for the recycling facility is not acceptable.

ATTACHMENT B

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, Ca. 94105-3901

February 2, 1994

RECEIVED
2 4 1994
RADIATION DIVISION

MEMORANDUM

SUBJECT: Offsets required prior to permit issuance

FROM: David P. Howekamp
Director, Air & Toxics Division
Region IX

TO: John S. Seitz
Director, Office of Air Quality Planning and Standards

Yolo-Solano AQMD is intending to issue Authority to Construct (A/C) permits for a proposed paper recycling plant without requiring the source to obtain necessary offsets prior to permit issuance. The draft permits contain a condition which states: "Prior to initial reliability testing, [the source] shall submit to the District evidence of mitigation of all oxides of nitrogen and volatile organic compounds emitted." The facility, owned by ~~to~~ MacMillan-Bloedel, Haindl Papier, and HIPP Engineering, will have the potential to emit approximately 70 tpy each of NO_x and VOCs, in an area where the 50 ton/yr major source threshold applies.

Region IX commented in writing on the draft permits on January 18, 1994. We stated that offsets must be federally enforceable at time of permit issuance and actually achieved by the time the source commences operation. Our comment is consistent with our understanding of section 173 of the Act and EPA's historic position regarding the timing of obtaining offsets. Specifically, section 173(a) of the Act reads: "Any emissions reductions required as a precondition of the issuance of a permit... shall be federally enforceable before such permit may be issued." Furthermore, we understand that EPA has interpreted the language of section 173 to require that emission reductions claimed as offset credit to be federally enforceable prior to the issuance of a permit, and to be in effect by the time the permitted new source or modification commences operation. Region IX believes that this interpretation of section 173 represents current policy, which some argue is already a relaxation of EPA's previous position. However, Region IX is also aware that certain language in the NO_x Supplement to the General Preamble supports a contrary interpretation of section 173. It states, for example: "sources [may] secure the offset at any time up until the source commences operation." Under a strict reading, EPA could interpret this provision to apply only to NO_x sources, because the rationale for its inclusion was premised on the uncertainty of eventual NO_x RACT limits.

Region IX is being challenged by the Yolo-Solano AQMD and the California Air Resources Board (ARB) on our interpretation that offsets for sources proposing to locate in

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nonattainment areas be secured prior to permit issuance. They have asserted, based on the language of section 173, that offsets are not required until the source starts operation, coinciding with the issuance of a District operating permit. Further, ARB and the Yolo-Solano AQMD contend that strongly worded language in the A/Cs providing for offsets that are federally enforceable and achieved by the start of operation will prevent the source from operating without satisfying the offset requirement. ARB and Yolo-Solano AQMD have not yet relied on the NO_x supplement to support their argument. Rather, they have argued that the references to permit issuance in section 173 encompass both preconstruction permits and District operating permits. Region IX believes that it is critical for EPA to affirm its historic interpretation that section 173 requires obtaining federally enforceable offsets prior to issuance of A/C permits, even if it requires clarifying or revising the NO_x supplement.

Region IX is particularly concerned about the precedent that would be established if we allow ARB and the District to postpone the requirement for obtaining offsets until District operating permits are issued. Requiring offsets prior to A/C permit issuance allows EPA and public review, in conjunction with the 30 day public notice of the draft permit. Postponing the offset commitment complicates EPA's ability to impose federally enforceable conditions on the source pertaining to offsets. In addition, issues of equity arise if offsets are not available after the source has constructed.

We therefore request your office to provide Region IX with a statement of EPA's position on the timing of offsets. We believe that your statement on this issue is particularly necessary because of the contradictory positions between our historic interpretation of section 173 and the statements in the NO_x supplement. If you have any questions regarding this issue, please call me or have your staff call Matt Haber of my staff at (415) 744-1254.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION I
J.F. KENNEDY FEDERAL BUILDING, BOSTON, MASSACHUSETTS 02203-2211

4/M OFFSETS

ATTACHMENT C

March 1, 1994

Dennis Keschl, Director
Bureau of Air Quality Control
Department of Environmental Protection
State House, Station No. 17
Augusta, Maine 04333-4746

Dear Mr. Keschl: Dennis

This letter is in response to a Maine Department of Environmental Protection (DEP) proposal outlined in a December 12, 1993 letter regarding allocation of surplus nitrogen oxide (NO_x) emission reductions generated by Maine's enhanced Inspection and Maintenance (I/M) program to the Louisiana-Pacific (L-P) Corporation. In general, EPA supports the DEP's extension of its I/M program provided that specific requirements are satisfied by L-P and the DEP. The following paragraphs will further explain EPA's position on the DEP's proposal.

BACKGROUND

As described in your letter, L-P is proposing to construct an expansion to its oriented strandboard facility in New Limerick, Maine in Aroostook County. Aroostook county is part of the Ozone Transport region (OTR). Pursuant to the new source review requirements applicable in the OTR, L-P must secure sufficient emission reductions of NO_x for licensing approval. Your letter states that L-P will need approximately 200 tons of NO_x to offset the increase resulting from the expansion. The DEP indicates that 200 tons of NO_x credits are not available in Maine's inventory. According to L-P, the company's timetable for construction and commencement of operations necessitates that surplus NO_x reductions become available shortly. L-P is currently scheduled to begin construction on the proposed facility in the Spring of 1994 and to commence operations by April of 1995.

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The DEP intends to resolve L-P's need for NO_x offsets by relying on surplus NO_x reductions (i.e., reductions not otherwise required by the Clean Air Act) from Maine's enhanced I/M program, which Maine is extending to all moderate nonattainment areas in the State. Surplus NO_x reductions expected to be generated by this program would be utilized as offsets for new source emissions in the state, including the new emission increases expected from the expanded L-P facility. The December 12, 1993 letter indicates that Maine's enhanced I/M program would generate approximately 2000 tons of NO_x reductions, of which about 1200 tons would be considered surplus. The DEP submitted its enhanced I/M program to EPA in November, 1993 as a state implementation plan (SIP) revision. The DEP plans to allocate a portion of the surplus reductions (200 tons) to L-P as offsets for the proposed expansion.

In previous guidance on emission trading, EPA set forth the minimum requirements for the creation and use of emission reduction credits. EPA requires that emission reductions be surplus, quantifiable, permanent, and federally enforceable for use as emission offsets. Emission Trading Policy, 51 FR 43812 (December 4, 1986). In its NO_x Supplement to the Title I General Preamble, the agency recited these minimum criteria for the creation and use of NO_x emission reductions in emission trades. 57 FR 55620, 55625 (Nov. 25, 1992). EPA has evaluated the DEP's December 12, 1993 proposal in light of these criteria. The following section of this letter evaluates the requirements for Maine's NO_x emission reductions to be surplus, quantifiable and permanent. Thereafter, the letter discusses the requirement that these reductions be federally enforceable.

SURPLUS, QUANTIFIABLE AND PERMANENT REDUCTIONS

In order to create and use emission reductions from its enhanced I/M program, the reductions must be surplus, quantifiable and permanent. The first question for the DEP is whether or not NO_x emission reductions generated by the implementation of Maine's enhanced I/M program are surplus. The 1990 Amendments to the Clean Air Act codified EPA's longstanding policy that offsets must be surplus. See section 173(c)(2) of the Clean Air Act, which provides that "emission reductions otherwise required by the Act shall not be creditable" as offsets. EPA has interpreted this provision flexibly. Consequently, where appropriate, a block of emission reductions must be discounted to reflect reasonably available control technology (RACT), new source performance standards, I/M rule requirements, or any other requirement applicable to or reasonably foreseeable at the source of the emission reductions at the time of the use of the emission reductions as offsets. EPA's final I/M rule states, in part,

"emission reduction benefits from expanding coverage beyond the minimum urban area boundaries can... be used for offsets..." 40 CFR 51.350 (b)(3). After reviewing the population density criteria identified in EPA's I/M rule and the nonattainment status of areas in Maine, EPA Region I has determined that Cumberland County is the only area in Maine where enhanced I/M is required. The DEP intends to implement enhanced I/M in the seven counties currently designated as moderate nonattainment (i.e., Androscoggin, Cumberland, Kennebec, Knox, Lincoln, Sagadahoc, and York). Emission reductions of NO_x due to implementation of enhanced I/M in all counties except for Cumberland County would thus be surplus and available for generating NO_x emission reduction credits.[1]

The DEP's intention to allocate the Volatile Organic Compound (VOC) emission reductions achieved from implementing enhanced I/M in these six counties toward its 15% Reasonable Forward Progress (RFP) reduction requirement does not prohibit the treatment of the NO_x reductions as surplus. The NO_x emission reductions from Maine's enhanced I/M program will not and cannot be used towards the 15% reduction requirement. Thus, as noted above, the NO_x reductions from enhanced I/M that are being set aside for offsets are surplus provided that they are not necessary for, and will not be used in, any relevant attainment demonstration plan. The DEP committed in its December 12, 1993 letter not to rely on any of the 200 tons of NO_x that it plans to allocate to L-P as offsets in its attainment demonstration. The DEP should recognize that if further reductions are necessary to reach attainment of the ozone NAAQS, the DEP will need to implement additional control programs.

In order to allocate the NO_x reductions from the enhanced I/M program to L-P, the DEP must also show that the reductions are quantifiable and permanent. The DEP must demonstrate that it will secure sufficient emission reductions (200 tons) from implementation of its enhanced I/M program in the six counties. This could be done using estimates of Maine's vehicle miles travelled (VMT) and EPA's MOBILE model. EPA has not yet provided guidance on calculations of excess NO_x credits generated by an enhanced I/M program. In the absence of such guidance, EPA suggests that the DEP calculate the credit conservatively in order to ensure whether the trade will be approved. A conservative way to calculate the amount of excess NO_x credits

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[1] Please note that basic I/M is required in the Lewiston Auburn Nonattainment area. No NO_x reductions, however, are predicted from the basic I/M requirements. Therefore, the NOx reductions from Maine's enhanced I/M program in this area would be surplus.

available would be to multiply 1990 estimates of VMT times the emissions difference (in grams per mile) between no I/M program and Maine's program in the year 2020 as predicted by EPA's MOBILE5a model. The EPA recommends the year 2020 because enhanced I/M benefits are lowest in the out years and the MOBILE model does not presently predict beyond 2020. Maine's present program may have lower compliance rates, or waiver rates, because of the low mileage waiver presently authorized under Maine state law. Nevertheless, EPA currently expects that the level of credit generated through this calculation should be adequate for the immediate need to set aside a pool of credits for offsets in the near-term. EPA will be glad to work with you to define appropriate modeling assumptions for determining the exact level of credits available from year to year.

EPA suggests that the DEP revise its enhanced I/M SIP submittal (November, 1993) to articulate its intent to set aside credits and to make the demonstration discussed above. In addition, Maine should specify exactly how much credit it intends to set aside for the L-P permit. In addition to quantifying these reductions and ensuring that they are surplus, the DEP must also ensure that the offsets occur no later than the date on which the new source or modification commences operation. Prior to L-P beginning operation, the DEP should submit a demonstration acceptable to EPA which shows that the state is implementing its enhanced I/M program on schedule and that the enhanced I/M program has secured enough emission reductions of NO_x to meet the offset requirements for L-P. This will demonstrate to EPA that the emission reductions have occurred before the modification commences operation.

In addition, L-P should include documentation in its application for a new source review permit. L-P's application should quantify the amount of offsets needed by the company to expand its plant and describe how it plans to meet the offset requirements. The DEP should also include similar documentation in the proposed Findings of Fact and Order Air Emission License for this major modification. This will ensure that L-P submits a complete application and that the public has an opportunity to comment on the proposed offsets.

FEDERALLY ENFORCEABLE REDUCTIONS

Maine's enhanced I/M program that will generate the offsetting NO_x emission reductions must also be federally enforceable prior to L-P's commencement of operations at its expansion.

Section 173(a)(1) of the Clean Air Act provides that "permits to construct and operate may be issued if ... by the time the source is to commence operation, sufficient offsetting emissions reductions have been obtained." Subsection (a) goes on to provide that offsets on which a permit to construct and operate is conditioned under paragraph (1) "shall be federally enforceable before such permit may be issued." This augments the language of section 173 prior to the 1990 amendments that provided that offsets must be "legally binding" before a permit to construct and operate may be issued. Finally, section 173 (c)(1) provides that offsets "shall be, by the time a new modified source commences operation, in effect and enforceable."

As noted above, EPA's policy has long been that emission reductions must be federally enforceable for use as emission offsets. See Emission Trading Policy Statement, 51 FR 43812 (Dec. 4, 1986). In the General Preamble for Implementation of title I, EPA interpreted changes to section 173 in the 1990 Amendments as clarifying that offsets must be federally enforceable before the permit to construct and operate is issued. 57 FR 13498, 13553 (April 16, 1992). Further, EPA explained that, "while it is possible for a state to issue a permit to construct once sufficient emissions offsets have been identified and made federally enforceable (generally through a permit condition made to the permit of the existing source), the State must also ensure that the required emissions reductions actually occur no later than the date on which the new source or modified source would commence operation." Id.

Nevertheless, under the circumstances of this case, EPA will not object if the DEP issues L-P's permit to construct prior to EPA approval of Maine's enhanced I/M program that will generate the offsetting NO_x reductions, as long as L-P's permit contains a federally enforceable condition that expressly prohibits the commencement of any actual operations until EPA's approval of the Maine's enhanced I/M SIP submittal that will generate the offsets. EPA believes this position is appropriate for several reasons.

EPA recognizes the concern that sources of offsetting NO_x emission reductions are scarce in Maine. Based on discussions with you and your staff, it does appear that only a few potential sources of NO_x reductions exist in Maine, and you indicated at the November 29, 1993 meeting between Region I and the DEP that even those few sources combined would be insufficient to satisfy L-P's needs. Further, Maine has not yet adopted NO_x RACT regulation for existing stationary sources, and uncertainty regarding NO_x RACT rules could hinder efforts by new or modified sources to secure NO_x offsets. This is because the uncertainty could lead existing NO_x sources to retain potentially surplus NO_x

emission reductions for their own use. The offsets in this case have been identified and are to be achieved by an adopted State program that has already been submitted to EPA as a SIP revision. Maine's program involves extension of its enhanced I/M program to areas where it is not otherwise required to achieve NOx reductions, and EPA does not foresee substantial obstacles to promptly approving the NO_x elements of the program for such areas. Moreover, the DEP intends to rely on the enhanced I/M program to achieve VOC reductions needed for its SIP planning obligations. Under these circumstances, EPA can be particularly confident that Maine will actually implement its enhanced I/M program to achieve the offsetting NO_x emission reductions by the time L-P is to commence operations. In short, EPA does not believe it is necessary to hold up L-P's permit pending the longer period needed to review Maine's SIP submittal, especially since the offsets have been identified, appear reliable, and because the SIP submittal provides particularly great security that the offsets will be achieved.

In recognition of L-P's plan to commence operations in April 1995, EPA will expedite its review of Maine's enhanced I/M program. Section 110(k)(2) provides that EPA must take final action on a SIP submittal within 12 months of determining that the submittal is complete. EPA determined that Maine's enhanced I/M submittal was complete on January 24, 1994. To speed up EPA's processing of this submittal, EPA recommends that the State of Maine request an expedited EPA approval of the portion of the I/M program not mandated as part of the federal I/M regulation. This will allow EPA to approve the program in those "surplus" areas even if Maine's program does not completely meet all of the requirements established by EPA's enhanced I/M rule. Because the program in those areas goes beyond the requirements of the Clean Air Act, it does not need to meet all of the requirements of the enhanced I/M rule.[2]

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[2] It should be noted that, to the extent that the program does not meet the requirements of EPA's enhanced I/M rule, Maine may need to reduce the amount of emission reductions creditable to its I/M program.

If you or staff have any questions regarding this determination, please contact Brendan McCahill at (617) 565-3262 for new source review issues or Robert Judge at (617) 565-3233 for mobile source issues. Thank you for your assistance in this matter.

Sincerely,

Linda M. Murphy

Linda M. Murphy, Director
Air, Pesticides and Toxic Management Division

cc: Dean Marriott - Maine DEP
Dennis Keschl - Maine DEP
Bryce Sproul - Maine DEP
John Chandler - Maine DEP
Marc Cone - Maine DEP
Peter Chase - Operations Manager, L-P
Daniel Boxer - Pierce, Atwood, Scribner, Allen, Smith & Lancaster
George Mitchell - US Senator, Maine
Michael Michaud - State Rep., Maine

MEMORANDUM July 21, 1993

SUBJECT: Use of Shutdown Credits for Offsets

FROM: John S. Seitz, Director
Office of Air Quality Planning and Standards (MD-10)

TO: Addressees

This memorandum and attachment respond to issues involving the Environmental Protection Agency's (EPA's) new source review (NSR) rules and guidance concerning the use of shutdown credits. The attachment provides a full discussion of the issues and this policy. The regulations in 40 CFR 51.165(a)(3)(ii)(C)(2) provide that where a State lacks an approved attainment demonstration, emissions reductions from shutdowns or curtailments cannot be used as new source offsets unless the shutdown or curtailment occurs on or after the date a new source permit application is filed. A concern raised is that because the Clean Air Act Amendments of 1990 (1990 Amendments) have created new schedules for submitting attainment demonstrations,[1] the existing NSR rules restricting the use of so called "prior shutdown credits" may be read as unnecessarily hindering a State's ability to establish a viable offset banking program for several years. Since this situation was not accounted for in EPA's prior policy statement, EPA determined it was appropriate to reconsider its position in light of the 1990 Amendments.

The reconsideration led to the conclusion that States should be able to follow, during the interim period between the present and the date when EPA acts to approve--or--disapprove an attainment demonstration that is due, the shutdown requirements applicable to areas with attainment demonstrations. This interpretation only extends to those otherwise creditable shutdowns and curtailments actually occurring during the time period from enactment of the 1990 Amendments (November 15, 1990) through the period until EPA acts to approve--or--disapprove

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[1]For instance, attainment demonstrations are not due until November 15, 1993 for moderate ozone nonattainment areas, and November 15, 1994 for serious and above areas. Attainment demonstrations are not required by the Clean Air Act (Act) for marginal and nonclassified ozone nonattainment areas and for ozone attainment and unclassifiable areas in the ozone transport region (OTR).

an attainment demonstration that is due. This policy cannot be extended to situations where an attainment demonstration is lacking. In addition, to be sure that the State remains on track for attainment, the lifting of the shutdown restrictions is conditioned on the State meeting other applicable part D planning requirements as discussed in the attachment to this memorandum.

If the State's submittal is delinquent for any of the reasonable further progress (RFP) milestone submissions identified in the attachment or the State's attainment demonstration is disapproved, the restrictions on use of shutdowns will again apply. To be creditable, the shutdowns or curtailments being used as offsets must have occurred on or after November 15, 1990; the emissions from the shutdown or curtailment must be included in the emissions inventory for attainment demonstration and RFP milestone purposes; and the amount of the credit must be the lower of actual or allowable emissions for the source. Pursuant to EPA's existing regulatory framework, the shutdown or curtailment must be permanent, quantifiable, and federally enforceable.

For marginal ozone nonattainment areas and for the attainment and unclassifiable ozone areas in the OTR, EPA's present interpretation is that these areas should be allowed to follow the less-restrictive shutdown policies applicable to areas in compliance with the attainment demonstration requirements. Since these areas are not required by the 1990 Amendments to submit attainment demonstrations, it would be inconsistent with EPA's purposes in adopting the shutdown restrictions to treat these areas as if they had failed to make this demonstration. The RFP will be protected by the mandatory bump-up provisions applicable to marginal ozone areas and by the requirement that ozone nonattainment areas in the OTR continue to meet RFP milestones in order to qualify for this interim policy.

States may interpret their own regulations or, when necessary, make a State implementation plan (SIP) submittal in accordance with this policy. This policy statement is limited to ozone nonattainment areas and ozone attainment and unclassifiable areas in the OTR. States may wish to seek relaxation of the policy for other pollutants. We will consider these requests on a case-by-case basis. It should be noted that at least some attainment demonstrations are in fact due.[2]

This guidance document does not supersede existing Federal or State regulations or approved SIP's. The policies set out in this memorandum and attachment are intended solely as guidance during the interim period as specified in this memorandum and do not represent final Agency action. This policy statement is not ripe for judicial review. Moreover, it is not intended, nor can it be relied upon, to create any rights enforceable by any party in litigation with the United

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[2]For instance, attainment demonstrations in moderate carbon monoxide areas were due on November 15, 1992; attainment demonstrations for moderate PM-10 (particles with an aerodynamic diameter of less than or equal to a nominal 10 micrometers) areas were due on November 15, 1991.

States. Agency officials may decide to follow the guidance provided in this memorandum, or to act at variance with the guidance, based on an analysis of specific circumstances. The EPA also may change this guidance at any time without public notice. The EPA presently intends to address further the matters discussed in this document in its forthcoming NSR rulemaking regarding regulatory changes mandated by the 1990 Amendments and will take comment on this interpretation of the shutdown provisions in light of the 1990 Amendments as part of that rulemaking.

The Regional Offices should send this memorandum with the attachment to their States. Questions concerning specific issues and cases should be directed to the appropriate EPA Regional Office. Regional Office staff may contact Mr. David Solomon, Chief, New Source Review Section, at (919) 541-5375, if they have any questions.

Attachment

Addressees
Director, Air, Pesticides and Toxics, Regions I, IV and VI
Director, Air and Waste Management, Region II
Director, Air, Radiation and Toxics Division, Region III
Director, Air and Radiation Division, Region V
Director, Air and Toxics Division, Regions VII, VIII, IX and X

cc: Air Branch Chief, Regions I-X

Attachment

FULL DISCUSSION ON USE OF PRIOR SHUTDOWNS

In response to concerns regarding use of pre-application shutdowns that have arisen by virtue of the Clean Air Act Amendments of 1990 (1990 Amendments), the Office of Air Quality Planning and Standards has reviewed the policy on the use of prior shutdown credits. This policy, and the regulations in part 51, were revised in 1989 to allow for the use of prior shutdown credits for offset purposes in those areas having approved attainment demonstration plans [see 54 FR 27286 (June 28, 1989)]. The Agency, however, retained a restriction on the use of prior shutdown credits in areas without approved attainment demonstrations. All of these areas had failed to attain the national ambient air quality standards by the statutory deadline.

The 1990 Amendments created new deadlines and new control requirements which have dramatically changed the circumstances that shaped EPA's 1989 decision regarding the use of shutdown credits, such that a literal reading of the 1989 regulation would now be inconsistent with EPA's underlying policy in some circumstances. All nonattainment areas are subject to new attainment deadlines, and all ozone nonattainment areas classified as moderate and above are now required to submit new attainment demonstrations. Indeed, in ozone nonattainment areas, the 1990 Amendments impose a series of planning requirements and milestones to mark progress towards attainment. For instance, the amended Clean Air Act (Act) required States with moderate ozone nonattainment areas to submit revised control measures, revised new source review (NSR) rules, and a 1990 emissions inventory by November 15, 1992, and allows States until November 15, 1993 to submit additional control measures and an attainment demonstration plan that achieves at least a 15 percent reduction in volatile organic compounds (VOC) emissions. Serious and above ozone areas were required to submit numerous new or revised control measures, revised NSR rules, and a 1990 emissions inventory by November 15, 1992; additional control measures and a 15 percent reduction plan by November 15, 1993; and full attainment demonstration plans by November 15, 1994.

In 1983, EPA proposed to lift nearly all restrictions on the use of prior shutdown credits. In making that proposal, the Agency presumed that by the time it took final action on the proposal, areas would either have in place approved attainment demonstrations or be subject to a construction moratorium (see 54 FR 27292). However, by the time EPA took final action--some 6 years later--this proved not to be the case. Many States neither fully demonstrated attainment nor were subject to a construction moratorium. Thus, in justifying the decision to continue restrictions on the use of prior shutdowns in areas without an attainment demonstration, EPA explained that "the nonattainment areas requiring but lacking attainment demonstrations . . . are at the center of EPA's current concern regarding the shutdown credit issue . . . " (Id.).

Specifically, EPA explained that the unrestricted use of shutdown credits would lead to offset transactions where there was no nexus between the decision to shut down the existing source or unit and the decision to construct new capacity. Instead, shutdowns that would occur regardless of any potential to sell the resulting emissions reduction would not be available for

reasonable further progress (RFP), but instead would be used to accommodate additional emissions growth in the nonattainment area. In the face of a State's failure to adopt an attainment plan long past the statutory deadline for submitting an approvable plan, EPA determined that the unrestricted approach was inconsistent with the requirements of RFP. Accordingly, EPA retained its restrictive shutdown policy for such areas in order to guarantee to the extent possible that the new source would secure the offsetting reduction out of the area's existing emissions and thus assure RFP (Id. at 27293). On the other hand, where the State implementation plan (SIP) contained a demonstration of attainment--"and hence an independent assurance of RFP"--EPA would be satisfied with a "more attenuated link" between the shutdown and the new construction (Id.).

Another factor favoring retention of the narrow shutdown policy in areas needing but lacking approvable attainment demonstrations was EPA's intention at the time to impose substantial planning burdens on many States for their failure to meet the December 31, 1987 attainment date for ozone and carbon monoxide. At the time EPA published the 1989 shutdown regulations, it believed that many States would be facing the prospect of adopting severe measures to respond to EPA's finding that their present efforts at achieving RFP and attainment were substantially inadequate. Under those circumstances, EPA believed "that it would be inappropriate even to hold out the possibility that States could obtain approval at this time for expanded use of shutdown offset credits in areas with inadequate plans" (Id. at 27294). At a minimum, States would need an approved inventory so that EPA could verify the proposed use of a prior shutdown credit (Id.).

The 1990 Amendments changed this landscape dramatically. The Act as amended gives States new attainment deadlines and new dates for submitting attainment demonstrations.[3] No State can be said to have missed the overall attainment deadline or the date for submitting attainment demonstrations for ozone as required by the 1990 Amendments. Instead, States are in the process of developing new attainment demonstrations based on the specific planning requirements of the new provisions of the 1990 Amendments. As discussed, these provisions include not only specific emissions reduction strategies that must be implemented, but requirements that areas demonstrate periodically that the reductions are occurring and that specific progress towards attainment has been made. In addition, the "General Preamble for the Implementation of Title I of the Clean Air Act Amendments of 1990" (General Preamble) [see 57 FR 13498 (April 16, 1992)] includes a specific methodology for reconciling prior shutdowns with the 1990 ozone inventory, and assures that these reductions must be taken into account when

[3]Some areas subject to offset requirements (such as marginal ozone nonattainment areas and attainment areas in the ozone transport region) are not even required to submit attainment demonstrations.

submitting the attainment demonstration and when showing compliance with the various RFP milestones (see General Preamble, pp. 13507-13509).[4]

In total, these provisions provide the "independent assurance of RFP" that EPA pointed to before as being necessary to allow generous use of prior shutdown credits. Of course, if a State misses any of the RFP milestones, the rationale for a more restrictive use of shutdown credits returns. For this reason, EPA's position is that use of pre-application shutdown credits as offsets can only be allowed where State submissions have met and continue to meet the statutory planning mandates and air quality improvement milestones. As described below, once a State fails to meet any of the milestones in its SIP or to meet a RFP benchmark, EPA cannot be assured that the safeguards in the Act guaranteeing proper progress towards attainment are sufficient, and the restriction on use of pre-application shutdowns and curtailments must automatically resume until the delinquent planning provisions are submitted.[5]

In ozone nonattainment areas, this means that the temporary lifting of the restrictions under this policy is subject to the following conditions as they apply and as they come due:

- The State has submitted a completed emissions inventory as required by § 182(a)(1);

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[4]The increased offset ratios for VOC and nitrogen oxides in ozone nonattainment areas [see, e.g., § 182(a) - (e)] and the new requirement that all offsets be based on actual emissions reductions [§ 173(c)] provide further assurances that new source increases will in fact be counterbalanced by real reductions in actual emissions.

[5]In the General Savings Clause (§ 193), Congress required EPA to retain all regulations and other requirements in effect at the time of the passage of the Act, "except to the extent otherwise provided under this Act [or] inconsistent with any provisions of this Act." The EPA views the new deadlines for attainment and for the submittal of an attainment demonstration as creating sufficient inconsistencies to justify changing--during the short interim period until the date EPA acts on an attainment demonstration that is due--its pre-enactment position on shutdowns. This is especially true in the few nonattainment areas that are no longer subject to the attainment demonstration requirement and can never qualify for the more relaxed shutdown policy under the existing regulations.

! The State has submitted complete revisions to its NSR program as required by § 182(a)(2)(C);

! The State submits the 15 percent VOC reduction plan required by § 182(b)(1)(A) for moderate and above areas; and

! The State submits the attainment demonstration required by § 182(c)(2) for moderate and above areas.

Under this policy, if any of these submissions are delinquent, or if any of these submissions are deemed incomplete or disapproved, emissions reductions from shutdowns or curtailments can no longer be used for NSR offsets unless the criteria laid out in 40 CFR 51.165(a)(3)(ii)(C)(2) are met. Where there is an emissions reduction credit bank in place, banked credits from prior shutdowns or curtailments will be frozen until the State submits the delinquent SIP elements.

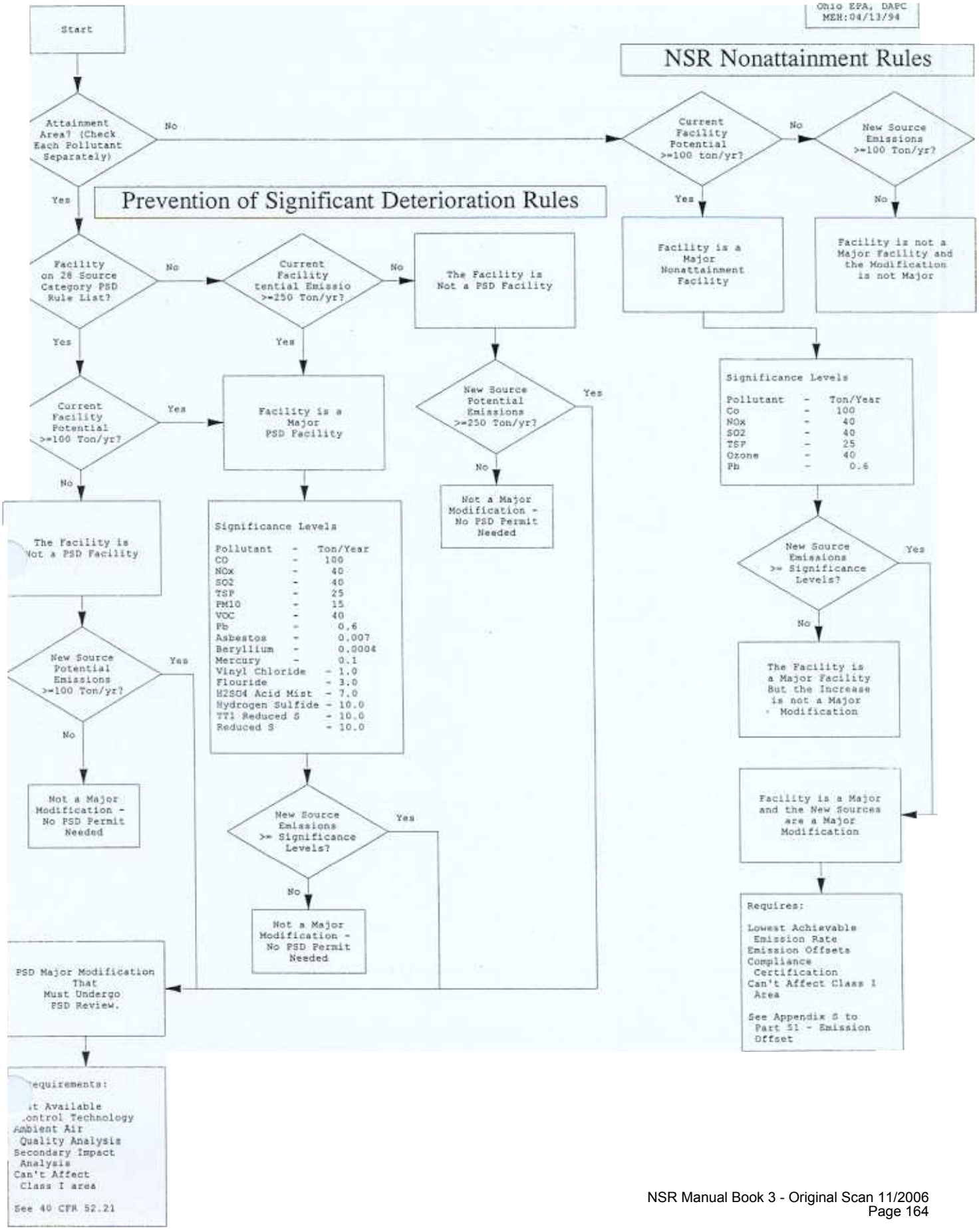
Furthermore, the emissions reductions represented by the shutdown or curtailment cannot be otherwise required by the Act, EPA regulations, or rules adopted by the State under the Act. In other words, the State cannot rely on emissions reductions credits in its overall attainment plan and rely on the same credits in the issuance of a NSR permit (i.e., no "double counting"). Consequently, where appropriate, emissions reductions from source shutdowns or curtailments must be discounted to reflect reasonably available control technology (RACT), new source performance standards, or any other Act requirement applicable to the source or reasonably foreseeable at the time of the use of the emissions reductions as offsets. For example, a State may have already developed RACT rules that would require compliance by a source in 1995. Any reductions at the source that would be necessary to meet the upcoming RACT requirement would need to be excluded in computing the offsets that would be available by a complete shutdown of the source.

It is possible that, during review of a permit application that uses emissions reductions from prior shutdowns or curtailments as offsets as allowed under this policy, a State may become delinquent in meeting the planning provisions outlined above. At such time as a State becomes delinquent, the restrictions for offsets are automatically restored. However, in such cases, States may allow offsets to remain creditable if the permit application was complete (as determined in writing by the reviewing authority) before the State became delinquent. Alternatively, States may use a later point in the permitting process for determining if these offsets are creditable.

History of the Federal Nonattainment New Source Review Program and Key Definitions

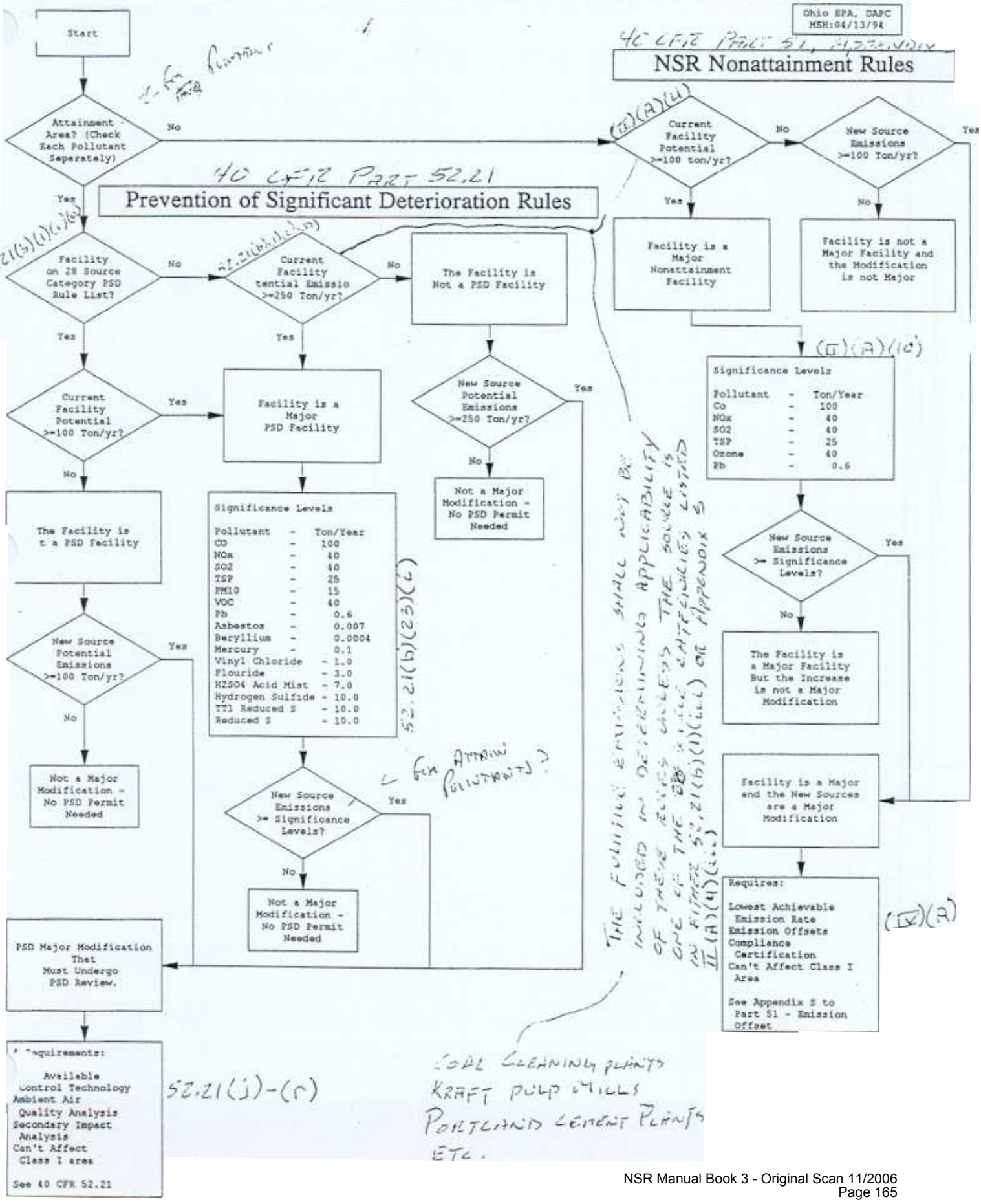
Applicabiltiy Dates	40 CFR Cite	Major Source Definition	Major Modification Definitions	Key Other Definitions
12/21/76-1/15/79	Interpretative Ruling at 40 FR 55524	100 ton of allowable emissions per year non - methane hydrocarbons	Increase in allowable emissions of greater than 100 ton/year where you add all increases (no decreases) from either the date of promulgation or from the most recent permit approval.	Allowable is defined as the applicable NSPS, SIP and the maximum rated capacity. If no NSPS or SIP, then it is the maximum rated capacity and the emission rate agreed to by the sources as a permit condition.
1/16/79-8/6/80	Appendix S to 40 CFR Part 51	PTE >100 ton per year	Increase in PTE of greater than 100 ton per year where you include all increases(no decreases) from the date of promulgation of the ruel or from the most recent construction approval.	PTE is the maximum capacity to emit absent controls taking into account enforceable permit conditions that limit operating rate, hours, type of amount of materials combusted or processed.
8/7/80 -	45 FR 59879 as amended	PTE >100 ton per year	significant net emission increase (forVOC - 40 ton/yr)	Significant net emission increase is based on the federally enforceable PTE of new sources minus the past actual of old modified sources. Add all increases and subtract all past actual decreases within the five year window.

Prevention of Significant Deterioration/Nonattainment Major Source Decision Chart



Prevention of Significant Deterioration/Nonattainment Major Source Decision Chart

Ohio EPA, DAPC
MSH:04/13/94



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
RESEARCH TRIANGLE PARK. NC 27711

OFFICE OF
AIR QUALITY PLANNING
AND STANDARDS

MAY 4 1995

Mr. Robert Kalish
Environmental Services Department
The Dow Chemical Company
Post Office Box 150
Plaquemine, Louisiana 70765-0150

Dear Mr. Kalish:

This letter responds to your letter dated April 10, 1995 concerning the Environmental Protection Agency's (EPA) guidance memorandum of March 11, 1991 entitled "New Source Review Transitional Guidance." You specifically request clarification on the applicability of the prevention of significant deterioration (PSD) regulations at 40 CFR 52.21 to modifications at major stationary sources that increase emissions of noncriteria air pollutants.

Under the PSD regulations, stationary sources that emit, or have the potential to emit, <u>any</u> air pollutant subject to regulation under the Clean Air Act (Act) in major amounts [see 40 CFR 52.21 (b)(1)(i)(a)] are major sources. The pollutants regulated under the Act may be criteria or noncriteria pollutants. Likewise, major modifications for <u>any</u> air pollutant subject to regulation under the Act, either criteria or noncriteria, at major stationary sources are subject to the PSD regulations (see 40 CFR 52.21(i)(2)]. For PSD applicability purposes, an increase in a criteria pollutant is not a requisite for modifications that increase noncriteria pollutants to be subject to PSD. For your example, this means that a modification resulting in a net emissions increase of 4 tons per year of fluorides is a major modification subject to the PSD requirements even if there would be no increase in the emissions of a criteria pollutant. Note that under section 112(b)(6) of the Act as amended in 1990, the hazardous air pollutants listed under section 112 of the Act are not subject to the PSD provisions.

Enclosed for your information is EPA's workshop manual entitled "New Source Review Workshop Manual." This manual provides additional information on the applicability of the PSD program.

Questions concerning this issue may be directed to Mr. Mike Sewell of this office at (919) 541-0873. I appreciate this opportunity to be of service and trust this information will be helpful to you.

Sincerely,

John S. Seitz
Director
office of Air Quality Planning
and Standards

Enclosure

cc: Regional Air Division Directors
Mike Sewell (MD-12)

(REF: OZPMRH-2-97)

MEMORANDUM

SUBJECT: Interim Implementation of New Source Review Requirements for $PM_{2.5}$

FROM: John S. Seitz, Director
Office of Air Quality Planning & Standards (MD-10)

TO: See Addressees

This memorandum addresses the interim use of PM_{10} as a surrogate for $PM_{2.5}$ in meeting new source review (NSR) requirements under the Clean Air Act (Act), including the permit programs for prevention of significant deterioration of air quality (PSD). The revised national ambient air quality standards (NAAQS) for particulate matter, which include the revised NAAQS for PM_{10} and new NAAQS for $PM_{2.5}$, became effective on September 16, 1997. In view of the significant technical difficulties that now exist with respect to $PM_{2.5}$ monitoring, emissions estimation, and modeling (described below), EPA believes that PM_{10} may properly be used as a surrogate for $PM_{2.5}$ in meeting NSR requirements until these difficulties are resolved. The EPA's views on implementing the ozone and PM_{10} NAAQS during the interim period following the effective date of the new 8-hour ozone and revised PM_{10} NAAQS will be set forth in a separate EPA memorandum.

Section 165(a)(1) of the Act provides that no new or modified major source may be constructed without a PSD permit. Moreover, section 165(a)(3) provides that the emissions from any such source may not cause or contribute to a violation of any NAAQS. Also, section 165(a)(4) requires best available control technology for each pollutant subject to regulation under the Act. The EPA's recent promulgation of the primary and secondary standards for $PM_{2.5}$ marks the first time that EPA has specifically regulated fine particles--less than 2.5 microns in diameter--as a discrete indicator for particulate matter. Hence, this memorandum addresses how to implement PSD for $PM_{2.5}$ in light of significant technical difficulties which presently exist.

Of specific concern is the lack of necessary tools to calculate emissions of $PM_{2.5}$ and related precursors and project ambient air quality impacts so that sources and permitting authorities can adequately meet the NSR requirements for $PM_{2.5}$. Any comprehensive system for regulating $PM_{2.5}$ must take into account not only the fine particles emitted directly by stationary sources but also the various precursors, emitted by certain sources, which result in secondarily-formed fine particles through chemical reactions in the atmosphere. Recent studies suggest that

secondary particulate matter may account for over half of total ambient $PM_{2.5}$ nationwide. Emissions factors for the fine particles emitted directly by stationary sources, and for some important precursors (e.g., ammonia), are largely unavailable at the present time.

The EPA is in the process of developing a comprehensive modeling system which will be designed to include precursor emissions and account for secondary fine particle formation. The modeling system will also incorporate a method for nesting small local impacts from individual point sources within a greater modeling domain. Before this can be completed, it will be necessary to collect sufficient monitoring data to verify and validate protocol modeling results.

Ambient monitoring for PSD purposes must be collected from appropriately designed monitors. Sufficient quantities of such monitors will not be available specifically for PSD monitoring purposes in the near future. Initially, as these monitors become available, they will be needed to establish the new monitoring stations for the national network of $PM_{2.5}$ sites, including the required core $PM_{2.5}$ State and local air monitoring stations. A high priority has been placed on the establishment of the necessary $PM_{2.5}$ monitoring sites nationwide so that the information from these sites can be analyzed and evaluated in order to establish plans and priorities for implementing the $PM_{2.5}$ NAAQS, including the promulgation of section 107 designations.

For the reasons stated above, EPA believes that it is administratively impracticable at this time to require sources and State permitting authorities to attempt to implement PSD permitting for $PM_{2.5}$. The EPA has projects underway that will address the current technical and informational deficiencies, but it will take 3-5 years to complete these projects. Until these deficiencies are corrected, EPA believes that sources should continue to meet PSD and NSR program requirements for controlling PM_{10} emissions (and, in the case of PM_{10} nonattainment areas, offsetting emissions) and for analyzing impacts on PM_{10} air quality. Meeting these measures in the interim will serve as a surrogate approach for reducing $PM_{2.5}$ emissions and protecting air quality.

This memorandum presents EPA's views on the issues associated with implementation of the new $PM_{2.5}$ NAAQS under Federal, State and local NSR programs. The statements do not bind State and local governments and the public as a matter of law. When the technical difficulties are resolved, EPA will amend the PSD regulations under 40 CFR 51.166 and 52.21 to establish a $PM_{2.5}$ significant emissions rate, and EPA will also promulgate other appropriate regulatory measures pertinent to $PM_{2.5}$ and its precursors. Because the earliest date on which $PM_{2.5}$ nonattainment areas will be designated is in 2002, and nonattainment NSR does not apply until after nonattainment designations are made, implementation of the nonattainment NSR requirements under part D of title I of the Act need not be addressed at this time.

If you have any questions concerning this memorandum or wish to address any issues raised herein, please contact Dan deRoeck at (919) 541-5593.

Addressees:
Director, Office of Ecosystem Protection, Region I
Director, Division of Environmental Planning and Protection, Region II
Director, Air, Radiation, and Toxics Division, Region III
Director, Air, Pesticides, and Toxics Management Division, Region IV
Director, Air and Radiation Division, Region V
Director, Multimedia Planning and Permitting Division, Region VI
Director, Air, RCRA, and Toxics Division, Region VII
Assistant Regional Administrator, Office of Pollution
Prevention, State and Tribal Assistance, Region VIII
Director, Air and Toxics Division, Region IX
Director, Office of Air Quality, Region X

cc: New Source Review Contacts
Greg Foote (2344)
Mark Kataoka (2344)
Lydia Wegman (MD-10)

bcc: Karen Blanchard (MD-12)
Tom Curran (MD-12)
Dan deRoeck (MD-12)
Bill Hamilton (MD-15)
Sally Shaver (MD-15)

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revised: 10/21/97

November 17, 1998

MEMORANDUM

SUBJECT: Guidance on the Appropriate Injunctive Relief for Violations of Major New Source Review Requirements

FROM: Eric V. Schaeffer, Director
Office of Regulatory Enforcement

TO: Addressees

This guidance sets forth the injunctive relief that the U.S. Environmental Protection Agency (EPA) should seek in settlements of major New Source Review (NSR) enforcement actions.[1] Monetary penalties should continue to be determined pursuant to the Clean Air Act Stationary Source Penalty Policy and Appendices.

Introduction

To maintain a level playing field for regulated sources across the country, the Office of Regulatory Enforcement (ORE) is issuing this guidance setting forth the injunctive relief it expects to see in judicial Consent Decrees and in administrative case settlements concerning major NSR enforcement cases.[2] In particular, this guidance addresses cases where either (1) a source failed to obtain a major NSR permit prior to commencing construction of a major source or a major modification or (2) a source with a synthetic minor limit[3] regularly violated that limit.

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[1] New Source Review includes the Clean Air Act Part D nonattainment NSR and the Part C Prevention of Significant Deterioration (PSD) programs.

[2] Many civil major NSR cases are deemed to be "nationally significant," and hence, require Headquarters concurrence. This guidance also applies to administrative major NSR cases. Thus, any reference to requirements of a "Consent Decree" in the context of a civil case applies equally to the resolution of an administrative major NSR case.

[3] A "synthetic" minor limit restricts potential emissions at an otherwise major source to levels below applicable major source thresholds. These limits generally are in the form of

As Congress stated in the Prevention of Significant Deterioration (PSD) portion of the Clean Air Act (CAA or Act), the general purpose of the NSR programs is to protect public health and welfare (including air quality) while "insur[ing] that economic growth will occur in a manner consistent with the preservation of existing clean air resources." 42 U.S.C. § 7470. One method relied on to achieve this purpose is to require the use of ever-improving control technology as new sources of air pollution are built. The NSR programs also are a means to phaseout the grandfathering of existing sources created in the 1977 Act. As the D.C. Circuit stated in Alabama Power v. Costle, "[t]he statutory scheme intends to 'grandfather' existing industries; but the provisions concerning modifications indicate that this is not to constitute a perpetual immunity from all standards under the PSD program." 636 F.2d 323, 400 (D.C. Cir. 1979). Thus, the NSR programs are instrumental in implementing the Act and in attaining the goal of clean air throughout the United States.

In order to effectuate the purpose of the NSR programs, EPA generally should, at a minimum, require the installation and operation of control technology or process changes that result in emission reductions equivalent to the best available control technology (BACT) in PSD cases and the lowest achievable emission rate (LAER) in nonattainment cases when resolving NSR enforcement actions.[4] When the case involves a source that failed to obtain any type of permit or limit at the time of construction, the source should not be allowed to avoid the installation and operation of pollution control equipment or process changes by obtaining a "synthetic" minor limit (usually a permit) after the fact unless compelling circumstances exist (see below).[5]

Similarly, if a case involves a source that obtained a timely synthetic minor limit, but which regularly violates that limit, this document provides guidance regarding when it is appropriate to

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operational or production limits. The term may also refer to limits an existing major source takes to restrict its potential emissions from a modification to levels below applicable significance thresholds (e.g., 40 tpy of SO_2). See 40 C.F.R. § 52.21(b)(23).

[4] Generally, BACT and LAER require the installation of add-on pollution control equipment. There are instances, however, when BACT or LAER may be reflected in a change in processes equipment design or operation (e.g., material usage). References to BACT/LAER in this guidance include both control equipment technology and operational changes.

[5] This reference to synthetic minor permits includes limits solely on operation and production (e.g., hours of operation) as well as limits that require installation and operation of control technology. In other words, a violating source may not avoid the injunctive relief required in this guidance by installing air pollution control equipment or making process changes which may reduce its emissions to below the applicable thresholds, but does not reduce emissions to the level possible with BACT/LAER-equivalent controls or process changes.

allow the source to merely come into compliance with the limit and when it is appropriate to require that the source achieve emissions reduction equivalent to those achieved by BACT/LAER-equivalent air pollution control equipment or process changes.

Failure to Obtain a Permit Prior to Construction

There are two scenarios addressed in this portion of the guidance; both involve a source with potential emissions above the applicable major source threshold that failed to obtain either a major NSR permit or synthetic minor limits prior to construction of a new major source or major modification.[6] Under the first scenario, the source's actual emissions exceeded the major source threshold. Under the second, the source's actual emissions never exceeded the major source threshold. This guidance only reflects the position that EPA may adopt in settling the matter and, like the Stationary Source Civil Penalty Policy, considers many factors when resolving an enforcement action. Importantly, under both scenarios, the source has violated the NSR requirements and could be compelled to comply fully with the statutory NSR permitting process. As discussed above, NSR is a key component to ensuring that economic growth and expansion occur in a way that minimizes any adverse impact on air quality. Thus, NSR violations often result in hundred of tons of excess emissions. Moreover, sources that violate major NSR requirements often gain a competitive advantage due to their ability to (1) avoid the time involved with the permitting process and (2) invest money that should have been allocated to emission reduction efforts to other activities. These reasons, as well as others, necessitate strict enforcement of NSR requirements.

When a violation involves the first scenario (the source's actual emissions exceeded the major source threshold) the source should be required to comply fully with all applicable NSR requirements, including major NSR permitting, control technology, air quality impact analysis and offsets. As part of an EPA settlement, the Consent Decree should require a minimum level of control which the Agency believes ensures BACT/LAER-equivalent emission reductions.[7] The

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[6] This guidance applies equally to new and existing sources. Thus, any and all references to new source construction and major source thresholds apply equally to modifications at existing sources and the applicable significance thresholds (e.g., 40 tpy of SO_2). See 40 C.F.R. § 52.12(b)(23).

[7] This guidance does not alter EPA's current policy that the BACT or LAER determination is made at the time a source goes through NSR permit review. Thus, if a source violates NSR in 1995 (e.g., by constructing a major source without a major NSR permit) and finally applies for a permit in 1998, whatever technology is BACT or LAER in 1998 should be required in the NSR permit. See, e.g., "BACT/LAER Determination Cut-off Date" (Jan. 11, 1990) (BACT determination cut-off at date of final permit issuance) (document no. 8.43 in New Source Review Guidance Notebook).

Consent Decree should be crafted to allow the source the option of installing and operating more effective control equipment if the permitting agency requires a different (e.g., more stringent) control technology, but it should not allow the source to obtain a permit with controls that are less stringent than required by the Consent Decree.

If a violation involves a source with actual emissions that never exceeded the major source threshold, the source should be required to achieve BACT/ LAER-equivalent emission reductions. If the source's potential emissions are below the applicable major source thresholds after application of BACT/LAER-equivalent controls or process changes, Regions have discretion to determine based on facts of the specific case whether to require full NSR compliance, or whether to allow the source to obtain a synthetic minor permit after it achieves BACT/LAER-equivalent emission reductions.

Moreover, based on the Agency's experience with enforcing the NSR requirements for the past 20 years, ORE has determined that it is no longer appropriate merely to allow a source to "correct" an NSR violation by dismantling an illegal modification, unless emissions from the new or modified unit would essentially become zero (e.g., the entire process line was shutdown). Thus, a source generally should not be able merely to return to pre-violation conditions in order to avoid installation of control equipment or implementation of process changes. For example, a source that illegally began burning tires in a boiler could not avoid NSR review (under scenario 1), or installation and operation of BACT/LAER-equivalent control equipment or process changes (under scenario 2), merely by agreeing to reducing the number of tires burned or by partial SO_2 controls. If the source had properly permitted the boiler at the time it began burning tires, it would most likely have been required to install and operate pollution control equipment that would still be operational and control emissions <u>after</u> the source stopped burning tires because the boiler would still be operating after the "modification" was undone (e.g., there would be emissions from whatever fuel was burned in lieu of tires). Thus, ceasing the burning of tires would not necessarily bring the source to the same level of emissions that could be achieved with additional control equipment.

Nonetheless, as stated above, the appropriate injunctive relief articulated for both scenarios is subject to consideration of compelling circumstances. Because it is a very case-specific, fact-intensive determination, it is not possible to define all potential compelling circumstances. For instance, a source's actual emissions may be so low that imposition of add-on control equipment would constitute economic waste (e.g., in the above example, total SO_2 and PM/PM_{10} emissions after the source stopped burning tires were too low to control in a cost-effective manner). Or perhaps the source is replacing the violating units with cleaner, energy-efficient new units that emit air pollution at levels near those that would be achieved by the older units with BACT/LAER-equivalent controls or process changes. Other compelling circumstances may involve significant, case-specific litigation risks related to whether a violation of major source requirements actually occurred or whether the injunctive relief set forth in this memorandum is appropriate in a particular case (e.g., permit shield or equity concerns; duration of violation is

extremely short). Importantly, because Headquarters must concur on most Consent Decrees involving major NSR violations, Regions are encouraged to coordinate with Headquarters early regarding consideration of compelling circumstances and prior to initiating settlement discussions with a defendant. After this guidance has been implemented for some time, ORE will consider supplementing it with any trends regarding what constitutes a compelling circumstance that may develop.

Failure to Comply with an Existing Synthetic Minor Limit

Generally, when a source with limits that restrict its potential emissions below major source threshold levels violates those limits, EPA can enforce the limits and/or the major source NSR requirements. This guidance is not meant to restrict the Regions' ability to enforce the terms of an existing synthetic minor limit or permit. However, pursuant to the court's reasoning in United States v. Louisiana-Pacific, 682 F. Supp. 1142, 1161-62 (D. Colo. 1988), when a source "knowingly and regularly" violates a synthetic minor limit, EPA's position is that it need not consider the limit when calculating the source's potential to emit and determining its major source status.[8]

EPA should take the position that a source's synthetic minor limit does not effectively limit the source's potential emissions when evidence indicates that the source has knowingly or regularly violated (or currently regularly violates) the limit. Thus, the source cannot simply claim that it has a limit that restricts its potential emissions; obviously this is not the case if the source's actual emissions have exceeded that "limit." A source should not be able to hold a limit up as a shield to major source status when it repeatedly violates the limit. As the court in Louisiana-Pacific stated,

> to hold that permit limitations which are repeatedly violated should nonetheless be considered in determining potential to emit would give better treatment to sources which knowingly violate such conditions than the treatment currently afforded sources which comply with the law.

Id. at 1161. Allowing sources to merely come into compliance with the synthetic minor limits would encourage sources to make modifications without preconstruction review and even exceed existing permits until they were caught, rather than go through NSR review prior to making modifications. Treating the source as a major source or major modification should be EPA's

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[8] Although all permit limits and conditions are enforceable, only operational or production limits that are "practically enforceable" will be used to determine a source's potential to emit. See, e.g.., "Guidance on Limiting Potential to Emit in New Source Permitting" (June 13, 1989) (document no. 2.31 in NSR Guidance Notebook). The EPA is in the process of proposing a rule which would codify the elements of a practically enforceable limit.

position even when the source's actual emissions do not exceed major source thresholds or significance levels. To allow a source to violate a limit that restricts potential emissions until its actual emissions exceeded major source or significance levels would collapse potential and actual emissions and ignore the mandate of the Act to consider both.

Nonetheless, there may be circumstances where the appropriate response is enforcement of the synthetic minor permit. Such circumstances may include situations where the permit violations are (a) relatively infrequent, (b) known to be minor in nature and (c) where the synthetic minor limit is significantly lower than the relevant applicability threshold.[9] As with the first portion of this guidance, the Regions are encouraged to coordinate early with Headquarters regarding application of these distinctions.

Conclusion

The guidance is effective immediately with respect to all cases in which the first injunctive relief offer has not yet been transmitted to the opposing party. To the extent earlier guidance, memoranda or other EPA documents imply that injunctive relief requiring a source to come into compliance with existing "synthetic" minor source limits, or obtain synthetic minor limits, is an acceptable resolution of an enforcement case, it is superseded by this guidance. As stated above, many major NSR enforcement cases are already considered "nationally significant," due to either issues in the case or penalty amounts of $500,000 or more, and thus require Headquarters concurrence. In addition, to ensure consistent implementation of this guidance, each Region should consider the first three major NSR cases (civil and administrative), regardless of the size of the penalty, it begins negotiating after the date of this guidance as "nationally significant" for delegation purposes and include Headquarters in the concurrence chain.

The policies set forth in this memorandum are intended solely as guidance to government personnel to be used to settle enforcement actions. They do not represent final Agency action, are not binding on any party, and cannot be relied upon to create any rights enforceable by any party. The EPA reserves the right to change this guidance at any time without public notice.

Questions concerning specific issues and cases should be directed to Carol Holmes of the Air Enforcement Division,, at 202-564-8709. This document will also be available on AED's Webpage at http://www.epa.gov/oeca/ore/aed.

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[9] EPA realizes that in some instances, a new source may not precisely know what its emissions will be until it has constructed and begun operations. Thus, a source which in good faith obtained synthetic minor source limits may find itself unable to meet those limits. Although this is a concern when determining the appropriate penalty, it should not affect the appropriate injunctive relief.

cc: John Seitz, OAQPS
Bruce Jordan, OAQPS
Lydia Wegman, OAQPS
Alan Eckert, OGC
Greg Foote, OGC

Addressees:
Regional Counsels, Regions I-X
Director, Office of Environmental Stewardship, Region I
Director, Division of Enforcement and Compliance Assurance, Region II
Director, Division of Air Quality, Region III
Director, Air, Pesticides, and Toxics Management Division, Region IV
Director, Air and Radiation Division, Region V
Director, Compliance Assurance and Enforcement Division, Region VI
Director, Enforcement Coordination Office, Region VII
Assistant Regional Administrator, Office of Enforcement, Compliance and Environmental Justice, Region VIII
Assistant Regional Administrator, Office of Pollution Prevention, State, and Tribal Assistance, Region VIII
Enforcement Coordinator, Office of Regional Enforcement Coordination, Region IX
Director, Office of Air Quality, Region X
Joel Gross, Chief, Environmental Enforcement Section, DOJ

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IV
345 COURTLAND STREET
ATLANTA, GEORGIA 30365

MEMORANDUM

DATE: DEC 1987

SUBJECT: Resolving Nonattainment NSR Violations by Making Major Sources Minor

FROM: Bruce P. Miller, Chief
Air Programs Branch

TO: Gary McCutchen, Chief
New Source Review Section (MD-15)
OAQPS

Recently, Region IV has had to address several questions regarding the proper permitting procedures for violating sources in nonattainment areas. In order to help resolve the questions with which we are now faced, we are requesting written confirmation of the following positions:

1) In nonattainment area, is it permissible for a source that was permitted as a minor source (i.e., less than 100 tons per year of the nonattainment pollutant), but actually operated at a level above the 100 ton per year threshold, to retain its minor source status?

   It is our position that a minor source can remain a minor source, even if it actually operated as a major source, provided the proper penalties are assessed for the period of violation.

2) It is permissible for a source in a nonattainment area which never obtained a construction permit (or which received an invalid minor source permit), but was built and operated at a level above the 100 ton per year threshold for some period of time, to be permitted as a minor source (i.e., potential emissions restricted to below 100 tons per year of the nonattainment pollutant)?

   If so, will the permitting of the violating source as a minor source negate the Lowest Achievable Emission Rate (LAER) and emissions offset requirements which would have been imposed if the source had been permitted as a major new source at the time of construction?

It is our position that a source that constructed and operated (without a permit) as a major source may be permitted as a minor source, provided the proper penalties are assessed, to remove the economic benefit achieved by the company for operating a major source without controls or without a valid permit.

It is also our position that if such a source is permitted as a minor source that the requirements for LAER and offsets would not apply.

3) Do these same conclusions hold true for sources in attainment areas?

It is our position that they do.

Please concur with our position or advise otherwise. You may contact me or Wayne Aronson of my staff at FTS 257-2864 if you need further clarification or additional information.

JUN 22 1990

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
230 SOUTH DEARBORN ST.
CHICAGO, ILLINOIS 60604

REPLY TO THE ATTENTION OF:

JUN 18 1990

Robert Hodanbosi
Division of Air Pollution Control
Ohio Environmental Protection Agency
P.O. Box 1049
1800 WaterMark Drive
Columbus, Ohio 43266-0149

Dear Mr. Hodanbosi:

This is in response to your April 19, 1990, letter related to the proposed modification to the city of Columbus Municipal Electric Plant. The application attempts to make the argument that the addition of gas burners to the coal and refuse derived fuel fired boiler should be exempted from Prevention of Significant Deterioration (PSD) permit review. The application suggests that, since the boiler has an operating history, the "WEPCO" decision sets a basis for using past operating practices for establishing post-modification potential emissions.

The application appears to suggest the following. First, gas firing (the gas is a combination of natural gas and land fill gas) would replace coal firing on a British Thermal Unit (BTU) for BTU basis. Second, the emission rates for nitrogen oxides, sulfur dioxide, and particulate matter are less for gas firing than for coal firing. Finally, by utilizing gas, there would be no emission increase, but rather a decrease in emissions. The applicant further argues that gas burners are being added to reduce the formation of dioxins and furans and to reduce opacity readings during start-ups. Therefore, according to the applicant, the burners should be exempted as air pollution control devices.

With respect to the "WEPCO" decision, the court made the decision based on "like kind" replacements in existing equipment. In this case, new gas burners are being added to a unit which now has no gas burners. Therefore, the "WEPCO" decision does not apply in this case.

With respect to exempting the burners as air pollution control devices, such exemptions are not given to modifications which may increase capacity utilization. Because some of the fuel, coal, which is relatively expensive, will be replaced by land fill gas, which has very little cost, there may be an incentive to use previously under utilized boiler capacity to generate electricity for sale into the grid. Neither the application nor the draft permit made it clear that increased equipment utilization will not occur. Therefore, no exemption as an air pollution control device can be made.

The proper way to determine the applicability of the PSD rules with this source is to compare the actual annual emissions before the modification with the actual annual emissions after the modifications according to 40 CFR 52.21(b)(2),(3) and (21). The calculation should be done only for unit 6 which is the only unit being modified. In this case, the actual emissions before the modification are calculated in one of the following two ways:

1) For pollutants limited by a source-specific requirement in the original PSD permit under which the plant was constructed, the actual emissions shall equal the allowable emissions in the PSD permit according to 40 CFR 52.21(b)(21)(iii). This is explained on page 52718 of the August 7, 1990, FEDERAL REGISTER.

2) For pollutants resulting from gas combustion which were not limited by a source-specific requirement in the PSD permit, actual emission calculations are based on data from the prior 2 year operating history according to 40 CFR 52.21(b)(21)(ii). In this case, it may include, for example, carbon monoxide and/or particles less than or equal to 10 microns in diameter.

If the computation of actual emissions, as described above, exceeds the post-modification potential emissions by the significance level; than the PSD requirements apply to that pollutant.

The nonapplicability determination as set forth in the City's permit application and draft permit is erroneous. We recommend that the application be reviewed in light of the above information and resubmitted for public comment. From the information available to us, it is not possible to determine if this source modification is subject to the PSD rules.

Sincerely yours,

Steve Rothblatt, Chief
Air and Radiation Branch

February 15, 1989 Applicability of the Clean Air Act's New Source Performance Standards (NSPS) and Prevention of Significant Deterioration (PSD) Provisions to the Proposed Life Extension Project at the Port Washington steam Electric Generating Station 2.35b

THE TEXT YOU ARE VIEWING IS A COMPUTER-GENERATED OR RETYPED VERSION OF A PAPER PHOTOCOPY OF THE ORIGINAL. ALTHOUGH CONSIDERABLE EFFORT HAS BEEN EXPENDED TO QUALITY ASSURE THE CONVERSION, IT MAY CONTAIN TYPOGRAPHICAL ERRORS. TO OBTAIN A LEGAL COPY OF THE ORIGINAL DOCUMENT, AS IT CURRENTLY EXISTS, THE READER SHOULD CONTACT THE OFFICE THAT ORIGINATED THE CORRESPONDENCE OR PROVIDED THE RESPONSE.

2.35b

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

FEB 15 1989

Mr. John W. Boston
Vice President
Wisconsin Electric Power Company
Post Office Box 2046
Milwaukee, Wisconsin 52301

Dear Mr. Boston:

This is a revised final determination, on reconsideration, regarding the applicability of the Clean Air Act's New Source Performance Standards (NSPS) and Prevention of Significant Deterioration (PSD) provisions to the proposed life extension project at the Port Washington steam electric generating station, which is owned and operated by Wisconsin Electric Power Company (WEPCO). This determination supplements the determination set forth in an October 14, 1988 letter to you from Lee M. Thomas, which in turn

incorporated my September 9, 1988 memorandum. I find it necessary to reconsider EPA's original determination and issue this revised determination in part to address matters raised by, and new information submitted by, WEPCO representatives since the October 10 letter. WEPCO believes that these new aspects call into question the accuracy of EPA's prior determination.

For the following reasons, EPA today reaffirms, with limited exceptions detailed below, its earlier findings regarding the Port Washington life extension project. I hereby incorporate by reference the October 14 letter and the September 9 memorandum, and reaffirm the findings and conclusions in those two documents except where they are specifically superseded below.

This action constitutes final agency action for purposes of judicial review under section 307(b) of the Clean Air Act, 42 U.S.C. Section 7607(b).

I. CAPITAL EXPENDITURE

EPA explained in its earlier determination that under the General Provision of the NSPS regulation, a physical or operational change which increases emissions at an affected facility is a modification subject to NSPS. See 40 CFR 60.14(a). However, 40 CFR 60.14(e) provides certain exceptions to that general rule. In particular, section 60.14(e) (2) provided that an increase in production rate at an affected facility would not, by itself, be considered a modification if that increase is accomplished without a capital expenditure.

As has been discussed in recent meetings between WEPCO and EPA, the October 14, 1988 letter from Lee M. Thomas was based in

part on information supplied by WEPCO in a letter dated October 11, 1988 which indicated that the increase in production rate at each of the five units would be accomplished with a capital expenditure. On October 13, 1988, and November 22, 1988 WEPCO submitted revised capital expenditure calculations. EPA has carefully reconsidered its earlier determination based on those two additional submissions(see Footnote 1). However, as explained below, they provide no grounds on which to alter EPA's earlier finding on capital expenditure.

The modification provisions are designed in part to subject to NSPS those emissions increases caused by an increase in production rate that is in turn attributable to a significant investment in improvements to the capital stock. Consistent with this intent, capital expenditure

calculations employ the total, as opposed to annual, cost of a given project at each affected facility.

Thus, the December 16, 1975 preamble to the promulgated definition of capital expenditure states that "the total cost of increasing the production or operating rate must be determined. All expenditures necessary to increasing the facility's operating rate must be included in this total" (40 FR 58416) (emphasis added). The total cost of the planned work at each facility is then compared to the product of the existing facility's basis and the annual asset guideline repair allowance percentage used by the Internal Revenue Service for taxation purposes. If the total project cost for each facility exceeds the product of the basis and repair percentage for each facility, there is a capital expenditure at that facility. See 40 CFR 60.2.

It is appropriate to accumulate, for capital expenditure purposes, the cost of the renovations necessary to increase the facility's production rate, because the overall work necessary to increase a facility's production rate pursuant to a particular renovation project is the same whether the work is performed in one calendar year or during two (or more) years. The use of annual costs could encourage sources to distort normal business planning by artificially stretching out costs over time as a means of evading a finding of capital expenditure and consequent NSPS coverage (see Footnote 2).

(Footnote 1) October 13, 1988 submission was not received in time to be considered in issuing EPA's letter of October 14, 1988.

(Footnote 2) Indeed, it appears that WEPCO may have extended the planned length of the Port Washington life extension project for precisely this purpose after being informed by EPA in the October

Rather, the purpose of the exemption in 40 CFR 60.14(e) (2) is to exclude from NSPS coverage increases in production rate that are accomplished without "an expenditure for long-term additions or improvements." See 39 FR 36948 (preamble to proposed NSPS regulations). Where the economic realities of the case are that increased production and, hence, emissions, are due to normal fluctuations in the business cycle rather than a considered decision to invest in substantial capital improvements, the NSPS do not apply.

The letter submitted on October 13 from Neil Childress of your staff to Gary McCutchen of EPA presented updated basis figures (determined by multiplying the original capital investment in the facility by a coefficient representing the inflation in construction

costs between the year of the investment and the year in which the capital expenditure calculation is made) for each of the emissions units at Port Washington. These figures included costs of repair or replacement of equipment, such as steam turbines, that is not part of the existing affected facility for NSPS purposes. Since applicability determinations under the NSPS modification provisions are based on the existing affected facility, capital expenditure determinations likewise are limited to costs associated with the affected facility. For NSPS Subpart Da, the affected facility is the steam generating unit as defined at 40 CFR 60.40a. Therefore, EPA staff requested WEPCO to limit the basis figures to the steam generating unit.

The November 22, 1988 letter from Neil Childress to Walt Stevenson of EPA presented revised cost figures on the renovation work on steam generating units 1 - 4 related to the capital expenditure calculations. These November 22 basis figures are understood to be limited to costs associated with the affected facility. The November 22 letter also presented a revised and extended schedule for the renovation work, under which the costs of repairs in any one year would not exceed the product of the annual asset guideline repair allowance percentage, which is 5% for electric utility steam generating units, and the basis of each unit. Mr Childress' letter concluded that since 5% of each

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14, 1988 letter that there would be a capital expenditure using the original schedule. The unit 1 renovations have been extended from four years to five; unit 2 has been extended from four years to six; unit 3 had been extended from three years to six; unit 4 has been extended from two years to four. (Compare Telecopier Transmission, Neil Childress, WEPCO, to Gary McCutchen, EPA, October 11, 1988 (table attached to Response to Question No. 4) with Letter, Neil Childress, WEPCO, to Walt Stevenson, EPA, November 22, 1988, at page 2.)

unit's updated basis is not exceeded by the cost of renovation work in any one year, there would not be a capital expenditure at any of the units. The revised figures also show that the total costs for each unit over the entire renovation period would exceed the 5% basis figure by 5O% to 325%.

As explained above, it is the total cost, not the annual cost of a renovation project that determines whether a capital expenditure has occurred. Accordingly, based on the calculations and total project costs in WEPCO's November 22, 1988 letter, the proposed project

would result in a capital expenditure at each of the five Port Washington units, and those units would not qualify for the exemption in the NSPS modification provisions at 40 CFR 60.14(e)(2) (see Footnote 3). As to unit 5, WEPCO did not submit cost data limited to the affected facility. Thus, I have no reason to alter EPA's original determination that WEPCO has not demonstrated that the increase in production rate at unit 5 can be accomplished without a capital expenditure.

In addition, I have determined that it is more appropriate to utilize the original basis of each affected facility (as adjusted to reflect past capital improvements), expressed in nominal dollars, rather than the updated basis, expressed in current dollars, in determining NSPS applicability. Thus, even if WEPCO were correct that annual renovation costs, rather than total costs, should be used in capital expenditure calculations, in this case a comparison of annual renovation costs and the

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(Footnote 3) WEPCO has argued that since the definition of capital expenditure at 40 CFR 60.2 refers to the IRS "annual asset guideline repair allowance percentage" (emphasis added), EPA is bound by the literal language of its own regulations to use annual rather than total project costs in making capital expenditure calculations. However, the regulations do not dictate such a result. Instead, on their face they call for a comparison between total renovation costs and the annual asset guideline. Had EPA intended the result suggested by WEPCO, it would have explicitly called for comparison of annual costs of the change for project, exceeding one year with the annual asset guideline. This it did not do. In addition, as indicated above, the purpose of the capital expenditure provision would not be served by annualizing project costs for capital expenditure purposes.

(adjusted) original basis of each affected facility shows that a capital expenditure would still occur (see Footnote 4).

In making a more detailed inquiry into the capital expenditure matter in response to WEPCO's request, I have found that neither the NSPS General Provisions nor the preamble thereto contain any discussion of the matter of original versus updated basis, and that EPA has rarely been called upon to address this issue. However, upon review of EPA's past practice in this area, I have found that in developing performance standards for particular industries, EPA has provided the regulated community a mechanism to calculate the original basis in making capital expenditure calculations. See, e.g., "Equipment Leaks

of VOC in Petroleum Refining Industry -- Background Information for Promulgated Standards," EPA-450/3-81-015b, December 7, 1983 (see Footnote 5). This suggests that EPA intended the original basis to be utilized to determine whether a capital expenditure is going to be made.

Moreover, I believe that the use of original basis is consistent with the overall purpose of the NSPS modification regulations in general, and the capital expenditure provisions in particular. The effect of using original basis is that the greater the age of an affected facility, the more likely it is that a given investment resulting in increased production will be deemed a capital expenditure and trigger NSPS. This is consistent with Congress' intent in adopting new source performance standards. Older facilities are more likely to use outdated equipment which does not reduce pollution to the extent more current technology does. Congress included modified sources within the new source performance standards of section 111 to ensure the use of new technology on such sources. See CAA Sections 111(a)(2) , 111(a) (4);

II. AIR HEATER RENOVATIONS AT UNIT 1

In January 1989, WEPCO asked EPA to determine whether replacement of the heat transfer surface elements on the unit 1 air heater would trigger PSD or NSPS applicability. However, in a letter dated February 3, 1989, WEPCO withdrew this request,

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(Footnote 4) It is worth noting in this regard that if EPA were to adhere to a literal reading of IRS guidelines as urged by WEPCO, it would have no choice but to use original basis as well as annualized costs in making capital expenditure calculations for Port Washington. Using this formula, WEPCO would exceed the repair allowance percentage at units 1 - 5 for most years, and NSPS would still apply.

(Footnote 5) This Background Information Document provides an alternative to the method prescribed in the General Provision when it is difficult to determine original costs. The formula uses replacement costs and an inflation index to "approximate the original cost basis of the affected facility."

asserting that it could not receive approval in the time necessary, while reserving the right to renew it at a later time as to unit 1 or any other unit at Port Washington. Because this issue may arise again, and because I believe it bears upon the project as a whole, I find it appropriate to address the matter of air heater element replacement.

Based on the information submitted regarding this new plan, as well as the earlier information submitted regarding air heater replacement work, I conclude that if WEPCO were to proceed under its revised and now withdrawn plan, it would not alter EPA's earlier finding that PSD and NSPS would apply. In order to explain this finding, it is useful to first summarize the relevant facts.

Originally, WEPCO advised EPA that it planned to replace the air heaters at units 1 - 4 in their entirety. As WEPCO explained:

> Air heaters are subject to the erosive and corrosive effects of the flue gas passing through them and require regular maintenance of the heat transfer surfaces.
>
> The plate-type air heaters on Units 1 - 4 do not lend themselves to replacement of the individual elements. Worn sections have been patched and blocked, where accessible, over the years. Now, however, overall corrosion and perforation has passed beyond the practical point of repair, and replacement of the air heaters is the economical way to maintain the air preheater system.
>
> The air heaters on Port Washington Unit 5 and the other units on the Wisconsin Electric system [other than Port Washington units 1 - 41 are of the Ljungstrom basket design, which allows the heat transfer surfaces (baskets) to be replaced easily. ***

See, e.g., List of Port Washington Projects, p. 6 (Attachment to April 21, 1988 letter from John W. Boston, WEPCO, to Gary McCutchen, EPA).

On January 11, 1989, WEPCO informed the State of Wisconsin that it was considering replacing all the plate elements at unit 1. In a letter to the State of Wisconsin, WEPCO described this project as routine repair work, "necessary to halt the continuing decrease in the capability of Unit 1," and submitted a list of 40 generating units where significant portions of the air heater have been replaced. See Letter, with attachment, from Mark P. Steinberg, WEPCO, to Dale Ziege, Wisconsin Department of Natural Resources, January 11, 1989.

In a telephone conversation with EPA staff the next day, WEPCO indicated that it desired to perform the unit 1 plate replacement work during a current unit outage; that it intended to replace only half, not all, of the elements, at a cost of approximately $500,000; that it intended to later scrap this work and replace the entire air heater as described in the original scope of work, at a cost of $2,600,000; and

that it was considering performing the same work at unit 4 also. See Record of Telephone Conversation between David Schulz, EPA, and Mark Steinberg, Neil Childress, and Walter Woelfle, WEPCO, January 12, 1989.

In a meeting on January 17, 1989, WEPCO related that if it replaced half of the plate elements now, it probably would replace the remainder as part of the total renovation project at a later date and not replace the air heater in whole. WEPCO also related that complete replacement of the plate elements should increase unit 1's capability to the original design capacity. Finally, WEPCO stated in response to questions from EPA staff that none of the air heaters or plate elements at units 1 - 4 had ever been replaced in the past. See Memorandum, Meeting with WEPCO regarding the Port Washington Generating Station, from David Schulz, EPA, to Files, January 27, 1989.

In addition to the above information, I note that WEPCO's list of 40 units at which air heater element replacements have occurred include no units containing plate elements such as those on units 1 - 4 at Port Washington. Instead, all of the examples submitted are of the Ljungstrom basket type or the tubular type. I conclude that those examples are too dissimilar to the plate-type elements in use at units 1 - 4 to support WEPCO's contention that the work in question is routine (see Footnote 6).

Based on all of the foregoing, I find no reason to depart from EPA's earlier conclusion that PSD and NSPS would apply to the air heater work on unit 1. It appears that despite WEPCO's recent recharacterization of this work as a separate project, it in properly viewed as an integral part of the overall Port Washington life extension project. WEPCO cannot evade PSD and NSPS applicability by carving out, and seeking separate treatment of, significant portions of an otherwise integrated renovation program. Such piecemeal actions, if allowed to go unchallenged, could readily eviscerate the clear intent of the Clean Air Act's

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(Footnote 6) Further, even the list of air heater replacement work submitted by WEPCO did not establish this as routine repair work. Those 40 units comprise only a small fraction of total operating utility units, and even at the 40 units, air heater repair or replacement appears to have been a one-time occurrence, not routine repair.

new source provisions. Accordingly, if seen as part of WEPCO's previously proposed renovation project, the recent recharacterization of the unit 1 air heater work does nothing to alter the factors

determinative of PSD and NSPS coverage.

III. CAPACITY TESTING FOR UNITS 1 - 4

A. Impact of Test Results on NSPS Applicability.

In Lee Thomas' October 14, 1988 letter, EPA stated that baseline emissions for NSPS purposes are determined by hourly maximum capacity just prior to the renovations. EPA relied on actual operating data to determine that current maximum capacity at units 1 - 4 has significantly deteriorated, such that the restoration of original design capacity through the life extension project would result in corresponding emissions increases. As to unit 5, EPA stated that current capacity at unit 5 is zero because it is physically inoperable. EPA rejected WEPCO's unsupported assertions that all five units could be operated at high capacities, but held open the possibility of further discussions on that point. Subsequently, in November and December of 1988, following discussions with EPA, WEPCO conducted capacity tests to determine current actual capacity.

Based on its review and analysis of the test data, EPA finds that the tests adequately demonstrate that units 2 and 3 can be operated at their original design capacity on a sustained basis. Accordingly, I hereby supersede EPA's earlier determination and find that NSPS would not apply to units 2 and 3 by virtue of the proposed renovations so long as the capacity of these units after completion of the work is no higher than demonstrated in the recent tests (694,000 and 690,000 pounds of steam per hour, respectively). As discussed in more detail below, this revised NSPS determination does not affect our determination that the PSD provisions would be applicable to the proposed work on these two units.

During the tests on units 1 and 4, WEPCO was able to operate these units at 497,000 and 586,000 pounds of steam per hour, respectively, representing 72% and 89% of these units' respective original design capacities. These tests are adequate to confirm EPA's original determination that units 1 and 4 are not capable of operating at their original design capacities, and that restoration of the lost capacity through the life extension will trigger NSPS coverage. EPA today also determines that these tests are not adequate to show that current actual capacity for purposes of establishing the NSPS baseline is as high as the levels achieved during the recent tests. Rather, I reaffirm that baseline for those units is determined by the lower capacities reflected in recent actual operating data as set forth in Lee Thomas' October 14 letter. EPA must reject the tests for

purposes of establishing actual NSPS baselines because during the testing discussed above, there were significant, measured exceedances of the applicable particulate mass emission limit, and several measured exceedances of the applicable opacity limit contained in the Wisconsin State Implementation Plan. One of the purposes of these tests was to determine the maximum actual capacity of the Port Washington units that can be achieved in a lawful manner. As a consequence of the measured exceedances, WEPCO's tests cannot be relied on to demonstrate that the company could lawfully sustain the levels achieved during the testing.

Regarding unit 5, I find that by declining to conduct or schedule capacity tests, WEPCO has effectively conceded that unit 5 is at present inoperable. Therefore, I reaffirm that its baseline for NSPS purposes is zero.

B. Impact of Test Results on PSD Applicability.

In its February 3, 1989 letter, WEPCO asserted that EPA's October 14, 1988 determination assumed that the emission rate of each unit would increase following the renovations. Thus, WEPCO claims, EPA did not address the question whether units that are not increasing their emission rates following renovation can be deemed to trigger PSD. WEPCO is incorrect on both counts.

EPA's prior determination explained that under the PSD program, unlike NSPS, baseline emissions are determined by representative actual emissions prior to the physical or operational change. Accordingly, the results of testing conducted by WEPCO, intended to determine current maximum hourly capacity, have no impact on the existence of a significant net emissions increase for PSD purposes. Hence, those test results provide no reason to alter EPA's prior determination regarding PSD applicability.

Actual emissions are the product of the emission rate (amount of pollution per unit of production or throughput, e.g., pounds of sulfur dioxide per ton of coal combusted), the production rate or capacity utilization (amount of production or throughput per hour, e.g., tons of coal combusted per hour), and the hours of operation (e.g., hours per year). In its prior determination, EPA explained that an increase in any one of these three factors, if attributable to a physical or operational change, can trigger an emissions increase for PSD purposes, and rejected WEPCO's contention that only increases in the emission rate were determinative. In so doing, EPA explicitly assumed that emissions increases at Port Washington would come not from an increase in emission rate, but rather from increases in production rate or hours of operation. Sec Memorandum from Don R.

Clay, September 9, 1988 at 8.

WEPCO further implies in its February 3, 1989 letter that the demonstration that units 2 and 3 can operate now at maximum design capacity means that there will be no increase in production rate for PSD purposes following the renovations. This is not the case because PSD baseline emissions are determined by representative actual emission rate, production rate, and hours of operation prior to the physical change. Representative actual emissions are determined by examining the actual emissions during a representative two year period, (See 40 CFR 52.21(b) (21) (ii)) which in this case the Administrator determined to be 1983 and 1984 (See Lee Thomas' Oct. 14 letter, at 5) . The hourly capacity demonstration for NSPS purposes is not relevant to the PSD analysis.

IV. NSPS OPERATIONAL LIMITATIONS

In my September 9, 1988 memorandum, I pointed out that an affected facility cannot avoid NSPS applicability by offsetting, through the use of fuel with a lower sulfur content, an increase in the emission rate that would otherwise occur due to a physical or operational change. As I explained at that time, 40 CFR 60.14(e) provides that use of an alternative fuel or raw material -- such as higher-sulfur coal -- which an existing facility was designed to accommodate before a physical or operational change does not constitute a modification for NSPS purposes. It follows that the facility cannot avoid NSPS by switching to lower-sulfur fuel to counteract a prospective increase in emission rate because, under the regulations, the facility would always have to option to switch back to a higher-sulfur fuel at a later date without triggering NSPS.

Subsequent to the issuance of EPA's October 14, 1988 letter, WEPCO inquired whether it might be able to utilize lower-sulfur coal to avoid NSPS at Port Washington, notwithstanding the regulatory provision explained above, by agreeing to federally enforceable permit conditions that would bar the company from switching back to higher sulfur coal in the future. Restrictions of this nature are acceptable for netting transactions under the Act's PSD provisions. However, the statute reflects a basic political decision that fossil fuel-fired sources not rely only on natural occurring less-polluting fuels to comply with the NSPS. Instead, Congress declared that compliance must depend in part upon the application of flue gas treatment or other pollution control technologies. Thus, section 111(a) (1) (A) (ii) defines "standard of performance" for fossil fuel-fired sources as

> requiring the achievement of a percentage reduction in the

> emissions from such category of sources from the emissions which would have resulted from the use of

> fuels which are not subject to treatment prior to combustion

Congress further clarified this point in a later paragraph of section 111(a) by adding:

> For the purpose of subparagraph (1) (A) (ii), any cleaning of the fuel or reduction in the pollution characteristics of the fuel after extraction and prior to combustion may be credited ... to a source which burns such fuel.

This core policy judgment is reflected as well in the legislative history of the 1977 Clean Air Act amendments. For example, the Conference Report states:

> The Senate concurs in the House provision with minor amendments. The agreement requires (1) that the standards of performance for fossil fuel-fired boilers be substantially upgraded to require the use of the best technological system of continuous emission reduction and to preclude use of untreated low sulfur coal alone as a means of compliance; ... (3) that for fossil fuel-fired sources, the new source performance standards must be comprised of both a standard of performance for emissions and an enforceable requirement for a percentage reduction in pollution from untreated fuel.

H.R. Rep. No. 95-564, 95th Cong., 1st Sess. 130.

Because the will of Congress is so clear that lower-sulfur fuels alone will not suffice to comply with NSPS, it would be inconsistent with the legislative intent for EPA to allow sources to use lower-sulfur fuel to avoid coverage of NSPS in the first instance in the manner suggested by WEPCO. If EPA were to follow such a course, numerous modifications to existing facilities could escape coverage in a manner contrary to the statutory purpose.

V. THE TIMING OF THE LIFE EXTENSION PROJECT

In discussions with EPA, WEPCO has challenged, on grounds of timing, EPA's position on baseline emissions for NSPS purposes. In its prior determination, EPA explained that under the NSPS regulations, baseline emissions are determined by hourly maximum capacity just prior to the renovations. Thus, the baseline for unit 5 at Port Washington is zero because the unit has been shut down for several years due to safety concerns. In response,

WEPCO has presented the hypothetical question whether EPA would still have found a zero baseline if unit 5 had been shut down on a Friday due to some unexpected or catastrophic failure of a major component previously in good working order, and WEPCO had sought to replace that component on the following Monday. WEPCO asserts that in such circumstances, EPA should have established baseline emissions using the emissions rate just prior to the breakdown.

I find it unnecessary to engage in speculation by addressing the hypothetical situation presented by WEPCO, because it is far removed from the true circumstances surrounding the proposed Port Washington life extension project. In fact, unit 5 has been shut down for over four years, not a weekend, and that is the foundation of EPA's analysis and determination.

In conclusion, with limited exceptions, EPA today reaffirms the decisions reached in the October 14 determination. In addition, EPA has concluded that the work on each unit constitutes a capital expenditure and that the proposed air heater plate replacement work on unit 1 would trigger PSD and NSPS. As a result of the capacity test demonstration, however, I find that units 2 and 3 at Port Washington can be operated at their design capacity on a sustained basis. Therefore EPA's earlier determination with respect to NSPS applicability is superseded and NSPS would not apply to units 2 and 3 by virtue of the proposed renovations so long as the capacity of these units after the completion of this work is no higher than demonstrated in the recent tests. This determination does not affect PSD applicability for these two units. If you should have any questions about the foregoing, please feel free to contact me. Thank you for your cooperation in this matter.

Sincerely,

Don R. Clay

Acting Assistant Administrator

for Air & Radiation .

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OCT 14 1988

Mr. John W. Boston
Vice President
Wisconsin Electric Power Company
Post Office Box 2046
Milwaukee, Wisconsin 52301

Dear Mr. Boston:

As you requested in our meeting on September 15, 1988, I have made final determinations regarding the applicability of the Clean Air Act's New Source Performance Standards (NSPS) and Prevention of Significant Deterioration (PSD) requirements to the proposed life extension project at the Port Washington steam electric generating station, which is owned and operated by Wisconsin Electric Power Company (WEPCO). For the reasons discussed below, I have determined that, as proposed, the renovations at Port Washington are subject to both PSD and NSPS requirements. However, EPA remains willing to work with you regarding methods of compliance. As we have discussed, one alternative would be to reconfigure the project such that no emissions increases would occur. My staff is ready to meet with you to discuss these matters at any time.

I. BACKGROUND

On September 12, 1988, David Kee, Director, Air and Radiation Division, EPA Region V, wrote you regarding PSD and NSPS coverage of the Port Washington renovations. Enclosed with that letter was a memorandum dated September 9, 1988 from Don R. Clay, Acting Assistant Administrator, addressing the background of the Port Washington project, and analyzing at some length the relevant interpretative issues. For purposes of brevity, I will not repeat that material here, but rather incorporate it by reference.

The September documents concluded that the life extension project, as proposed, likely would be subject to PSD and NSPS requirements. However, EPA also stated that final applicability determinations could not be provided at that time in the absence of certain factual information. In our subsequent meeting you requested that EPA furnish final determinations, and agreed to provide the necessary additional information. You also asked EPA to reconsider certain of the conclusions in Don Clay's memorandum. These matters are discussed below.

II. FINAL DETERMINATIONS

Your staff has responded to our requests for additional information, and I want to thank you for WEPCO's continued cooperation in doing so. Based on this, and the other information in EPA's files, I now make the following final determinations:

(1) The life extension project, as proposed, will render WEPCO's Port Washington plant subject to the PSD requirements of Part C of the Clean Air Act as a major modification within the meaning of the Act and the EPA regulations at 40 C.F.R. Section 52.21.

(2) The proposed life extension project will render each of the five steam generating units at the Port Washington plant subject to the NSPS requirements of section 111 of the Clean Air Act as a modification within the meaning of the Act and the EPA regulations at 40 CFR Part 60.

In reconsidering the memorandum and letter of September 9 and 12, I have taken a careful look at the issues you raised in our meeting: whether the renovations are routine; whether EPA has treated similar projects in a different fashion; and whether there would be an emissions increase due to a physical or operational change. However, I find no reason to depart from the reasoning of the September documents. Accordingly, I conclude that WEPCO's life extension project, if carried out as proposed, will involve a substantial and non-routine renewal of the Port Washington facilities that will significantly increase both hourly maximum and annual emissions of air pollutants.

Specifically, regarding the nature of the proposed work at Port Washington, I find that these renovations constitute physical changes for PSD purposes within the meaning of 40 C.F.R. Section 52.21(b)(2)(i), and physical and operational changes for NSPS exclusions for routine maintenance, repair, and replacement, nor the exclusions for increases in production rate or hours of operation. (See 40 C.F.R. Sections 52.21(b)(2)(iii) and 60.14(e)).

Regarding the emissions changes from the life extension project, based upon the emissions data and certain factual assertions submitted by WEPCO, I find that the Port Washington renovations will result in a significant net increase in emissions of several pollutants for PSD purposes within the meaning of 40 C.F.R. Section 52.21(b)(2)(i), (b)(3), and (b)(21). I find further that the renovations will result in an increase in the emission rate of several pollutants at each of units 1-5 for NSPS purposes within the meaning of 40 C.F.R. Section 60.14(a) and (b).

Enclosures A and B detail the emissions changes underlying these findings for PSD and NSPS purposes. As indicated above, EPA's calculations and determinations are based on data supplied by WEPCO. We will use the data in Enclosures A and B in the event you would like to work with us to establish an acceptable arrangement for satisfying PSD and NSPS requirements through the addition or enhancement of pollution control equipment, physical capacity restrictions, or, in the case of PSD, federally enforceable limitations on potential emissions.

III. DISCUSSION

As you requested, I have reconsidered the question of whether the physical and operational changes at Port Washington are routine, whether applying PSD and NSPS here would be inequitable in light of EPA's past treatment of renovation projects, and whether the renovations will result in emissions increases. These matters are addressed below, as is EPA's reasoning withrespect to the baselines for calculating the PSD and NSPS emissions increases reflected in Enclosures A and B.

Regarding the questin of routineness, the renovations involve the replace of steam drums, air heaters, and other major components that are integral to the continued operation of the source. The work will not simply maintain the facilities in their current state, but rather will significantly enhance their present efficiency and capacity, and substantially extend their useful economic life. In addition, the work called for here is rarely, if ever, performed. Moreover, this work is costly, both in relative and absolute terms. Based on these and other factors, I reaffirm Don Clay's findings on the non-routine character of the Port Washington changes. The September 9 memorandum contains a complete discussion of EPA's reasoning on this issue.

On the related equity question, I find no inconsistency here with EPA's prior determinations regarding routine and non-routine changes. I note initially that PSD and NSPS applicability determinations are made on a case- by-case basis. Thus, it was very difficult to analogize to other projects, which almost inevitably present significant factual differences. Nevertheless, my staff has reviewed the additional material you submitted on September 19, and September 27, 1988 regarding certain other renovation projects, and has informally surveyed EPA Regional Offices and state agencies.

I have concluded that none of the four steam drum replacements identified in your September 19 submission are sufficiently similar to the Port Washington project to support determinations of nonapplicability in this matter. The Carolina

Power and Light case involved a faulty steam drum replaced prior to the initial start-up of a new unit, and would not have increased emissions for PSD or NSPS purposes. The Great Western Sugar example did not involve a utility boiler, and was too small to be affected by NSPS. The Ashland Oil facility was not at a utility, involved a waste heat boiler that was not fossil-fuel fired, and hence, was not an emissions unit subject to PSD or NSPS. The Algoma Steel Co. facility was not a utility boiler, and not located in the United States.

In addition, the informal survey conducted by the Office of Air and Radiation disclosed no closely analogous cases that were ever reviewed by EPA headquarters for purposes of PSD or NSPS. In particular, EPA found no examples of steam drum replacement at aged electric generating facilities. Moreover, EPA could find no examples in which the Agency had analyzed and issued an applicability determination for a "life extension project" for any category of major source. Regarding the four utility projects identified in your September 27 submission, I note that they do not involve steam drum replacement. In addition, permit applications were not submitted to the state agencies for the Duke Power and Texas Utilities projects you cite. Consequently, they were not reviewed by any air pollution control agency. The Cincinnati Gas and Electric project was reviewed by the state, but not EPA. The state determined, and EPA Region II concurred, that the Hydraco Enterprises project was not subject to PSD based on a net decrease in emissions of all pollutants. Our informal survey and review of the projects you identified reveal that major construction activities undertaken by utilities that may be subject to Clean Air Act requirements have not been brought to the attention of EPA. The Agency is considering what steps may be necessary to address this situation.

EPA has discovered only two state agency determinations addressing life extension questions in a manner possibly inconsistent with EPA's analysis of the Port Washington project. These instances, which apparently were not brought to EPA's attention prior to the states' determination, do no create an inequity that would justify a different conclusion by EPA in this case.

As to the question of emissions increases at Port Washington, I believe that EPA has properly interpreted the PSD and NSPS regulations as applying to increases in emissions due to increases in hours of operation or production rate, where, as here, such operational or production increases are closely related to physical or operational changes. A contrary interpretation would allow even massive emissions increases stemming from significant new capital investment -- as distinguished from routine fluctuations in the business cycle --

to escape scrutiny under the Clean Air Act simply because the new investment did not involve an inherently more polluting production process. I do not believe that Congress intended such a result.

I would like to point out that the figures on emission increases in Enclosures A and B reflect my conclusions regarding the proper points in time from which to calculate emissions changes. For PSD, I have determined under 40 C.F.R. Section 52.21 (b) (21) (ii) that the two-year period of 1983 and 1984 -- prior to the source curtailments due to discovery of cracks in the rear steam drums -- are more representative of normal source operations than the most recent two-year period. This conclusion is appropriate in light of WEPCO's historical operations.

As to NSPS, there is no "representative emissions" concept under that program. Rather, under the circumstances presented by this case, the baseline emission rates for units 1 - 5 are determined by hourly maximum capacity just prior to the renovations. At this time, EPA is relying on the actual operating data you submitted to determine current maximum capacity. Although EPA is certainly open to further discussion on this point, the information contained in your September 27 and October 11, 1988 submissions is inadequate to support WEPCO's assertions that higher-than-actual capacities could be achieved on an economically sustainable basis. For example, you indicate that operation at higher levels at units 1-4 "could increase equipment deterioration thus causing further damage." Regarding Unit 5, you state that " safety concerns" dictated the decision to shut down that unit. Based on this information, we are unable to rely on WEPCO's statements as to maximum "achievable" capacity in determining the emissions changes at each of these units. Thus, for example, in the case of Unit 5, the current capacity must be regarded as zero.

IV. CONCLUSION

In adopting the PSD and NSPS programs, Congress intended to address the type of long-term capital investments in pollution-emitting facilities at issue in the Port Washington life extension project. Thus, as proposed, these renovations would be subject to the requirements of both programs. However, as indicated above, my staff remains ready to work closely with WEPCO to discuss specific pollution control equipment and permitting measures that would minimize the cost to WEPCO of complying with the requirements of the Clean Air Act. I have asked Don Clay to work with you in seeking a final resolution of the compliance issues by December 1.

Again, thank you for your cooperation in this matter.

Sincerely,

Lee M. Thomas

Enclosures

cc: Senator Robert W. Kasten, Jr.
Representative F. James Sensenbrenner, Jr.
Don Clay, EPA (ANR-445)
David Kee, Air & Radiation Div., Region V

Enclosure A

PSD Applicability
Port Washington Power Plant Renovation Project
(all emissions calculations are in tons per year)

Pollutant	Actual Emissions Baseline (1)	Potential Emissions (2)	Net Emissions Increase	PSD Level	Subject to PSD Review
Total suspended particulate	170	283 (3)	108	25	yes
Sulfur dioxide	24,236	56,621 (3)	28,385	40	yes
Nitrogen oxides	2,991	8,201	5,210	40	yes
Carbon monoxide	144	397	253	100	yes
Hydrocarbon	17	47	30	40	no
Beryllium	0.0016	0.005	0.0034	0.0004	yes
Fluorides	38	98	60	3	yes

NOTE: PSD applicability for the other PSD regulated pollutants listed at 40 CFR Section 52.21 (b)(23)(i) and (ii) has not been determined at this time.

1) Average emissions for two-year period defined by calendar years 1983 and 1984.

2) As calculated by WEPCO based on 1992 coal type, actual emissions after ESP, and an annual capacity utilization factor of 90%.

3) An EPA estimate of potential emissions, based on existing federally enforceable limits (i.e., applicable SIP), may be higher. The indicated PSD applicability determination would, however, not change.

Enclosure B

NSPS Applicability
Port Washington Power Plant Renovation Project

FULL LOAD EMISSIONS AT CURRENT CAPACITY
(BEFORE RENOVATION)

	UNIT-1	UNIT-2	UNIT-3	UNIT-4	UNIT-5
SO2 (LBS/HR)	1417	1828	2043	1580	-0-
PM (LBS/HR)	15	16	12	12	-0-
NOx (LBS/HR)	480	352	289	221	-0-

FULL LOAD EMISSIONS AT FUTURE CAPACITY
(AFTER RENOVATION)

	UNIT-1	UNIT-2	UNIT-3	UNIT-4	UNIT-5
SO2 (LBS/HR)	2046	2037	2088	2269	2695
PM (LBS/HR)	16	16	12	17	15
NOx (LBS/HR)	696	392	297	316	369

SUBJECT TO NSPS (AFTER RENOVATION)

	UNIT-1	UNIT-2	UNIT-3	UNIT-4	UNIT-5
SO2 (LBS/HR)	YES (a)	YES (a)	YES (a)	YES (a)	YES
PM (LBS/HR)	YES (b)	NO	NO	YES (b)	YES
NOx (LBS/HR)	YES (c)	YES(c)	YES(c)	YES (c)	YES (c)

NOTES:

(a) With less add-on control than NSPS requirement, emissions (lb/hr) would not increase and NSPS would not apply.

(b) Because of planned ESP upgrade, PM emissions (lb/MM Btu) after renovation are expected to be less than NSPS requirement. However, NSPS would require CEMS for opacity.

(c) Because arch-fired boilers are used at Port Washington, current NOx emissions (lb/MM Btu) are expected to be less than NSPS requirements. However, NSPS would require a CEMS for NOx.

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MEMORANDUM

DATE: September 9, 1988

SUBJECT: Applicability of Prevention of Significant Deterioration (PSD) and New Source Performance Standards (NSPS) Requirements to the Wisconsin Electric Power Company (WEPCO) Port Washington Life Extension Project

FROM: Don R. Clay, Acting Assistant Administrator for Air and Radiation (ANR-443)

TO: David A. Kee, Director
Air and Radiation Division, Region V

This is in further response to your March 25, 1988 memorandum requesting guidance on PSD applicability regarding the proposed renovation of the Port Washington Power Plant by the WEPCO. I have also addressed the question whether the renovations proposed for this facility would subject the individual units to Subpart Da of the NSPS.

Based on the information presented in your memorandum, subsequent written information received from WEPCO, information provided by the State of Wisconsin, and other information contained in the Environmental Protection Agency's (EPA's) files on this matter, I have concluded that, as proposed, this renovation project would not come within the PSD and NSPS exclusions for routine maintenance, repair, and replacement, nor the exclusions for increases in production rate or hours of operation. It also appears that the project would increase emissions within the meaning of these two programs. Thus, the renovation project likely would be subject to PSD review as a major modification of an existing stationary source and that the renovations proposed for units 1-5 at this facility probably would subject the individual units to Subpart Da of the NSPS as a modification. However, WEPCO has not yet requested EPA to make an applicability determination. In any case, it would not be possible to make final applicability determinations at this point, for three basic reasons.

First, EPA must be supplied sufficient data regarding the various pollutants emitted by the Port Washington facilities to determine, on a pollutant-specific basis, how the proposed renovations would affect emissions levels. Second, WEPCO might avoid both PSD and NSPS applicability by adding or enhancing pollution control equipment, or in the case of PSD, restricting

operations below maximum potential such that the emissions increases necessary to trigger applicability would not occur. The WEPCO should discuss its plans in this regard with EPA. Third, regarding NSPS applicability to unit 1, additional information is necessary to determine whether a physical or operational change would occur.

Thus, although this memorandum will serve to answer many of the questions necessary to reaching final determinations, you

should advise WEPCO that ultimately applicability depends upon changes in emissions after the renovations and whether the company decides to take the steps which would enable it to lawfully avoid coverage. Also, NSPS coverage of unit 1 can only be determined after an evaluation of the additional information regarding the work to be performed. In addition, as to NSPS, WEPCO should be advised to submit a formal request pursuant to 40 CFR 60.5 if it desires a final applicability determination.

As the need for further factual development here suggests, determinations of PSD and NSPS applicability are fact-specific, and must be made on a case-by-case basis. This memorandum provides a framework for analyzing the proposed changes at Port Washington and gives EPA's views on relevant issues of legal interpretation. It should also be useful in assessing other so-called "life extension" projects in the future. However, any such project would need to be reviewed in light of all the facts and circumstances particular to it. Thus, a final decision regarding PSD and NSPS applicability here would not necessarily be determinative of coverage as to other life extension projects.

If you have any further questions regarding the discussion or conclusions in this memorandum, please have your staff contact David Solomon of the New Source Review Section at FTS 629-5375.

I. Background

As mentioned in your March 25 request, the five coal-fired units at Port Washington began operation in 1935, 1943, 1948, 1949, and 1950, respectively. Each unit was initially rated at 80 megawatts electrical output capacity. In recent years, however, the performance of the units began to deteriorate due to age-related degradation of the physical plant. In particular, inspections performed by a WEPCO consultant in 1984 revealed extensive cracks originating from the internal surfaces of the rear steam drums and boiler bank boreholes in units 2, 3, 4, and 5, creating significant safety concerns. Because of these safety concerns and other age-related problems, in 1985 the operating levels of units 2, 3, and 4 were reduced, and unit 5 was removed from service. As a result of the plant's deteriorating condition, the maximum rated physical capacities of units 1, 2, 3, and 4 at this time are 45, 65, 75, and 55 megawatts, respectively.

The life extension project includes extensive capital improvements to the common facilities and each of the individual units, including replacement of the rear steam drum in units 2, 3, 4, and 5. The renovation work will restore the physical and operational capability of each unit to its original 80 megawatt nameplate capacity, and extend the useful life of the units well beyond the planned retirement dates that would otherwise apply. Upon completion of the project, WEPCO intends to substantially increase the actual operations at the Port Washington plant.

II. PSD Applicability

The life extension project at Port Washington is subject to preconstruction review and permitting under the Act's PSD provisions if it is a "major modification" within the meaning of the Act and EPA's regulations. The PSD regulations at 40 CFR 52.21 govern this determination because Wisconsin has been delegated PSD permitting authority under the provisions of 52.21(u). The definition of "major modification" in 52.21(b)(2)(i) requires an analysis of several factors. These factors may be grouped under two general questions. Will the work entail a "physical change in or change in the method of operation of a major stationary source"? If so, will the change "result in a significant net emissions increase of any pollutant subject to regulation under the Act" [see 52.21(b)(2)(i)]? The Port Washington facility is an existing major stationary source

because it emits well in excess of the PSD threshold amount for several pollutants.

A. Physical Change or Change in the Method of Operation

This requirement of a major modification is satisfied if either a physical or operational change would occur.

1. Physical Change

The renovation work called for under the proposed life extension project at Port Washington would constitute a "physical change" at a major stationary source. The clear intent of the PSD regulations is to construe the term "physical change" very broadly, to cover virtually any significant alteration to an existing plant. This wide reach is demonstrated by the very narrow exclusion provided in the regulations: other than certain uses of alternate fuels not relevant here, only "routine maintenance, repair and replacement" is excluded from the definition of physical change [see 52.21(b)(2)(iii)(a)].

In determining whether proposed work at an existing facilityis "routine," EPA makes a case-by-case determination by weighing the nature, extent, purpose, frequency, and cost of the work, as well as other relevant factors, to arrive at a common-sense finding. In this case, all of these factors suggest that the work required under WEPCO's life extension project appears not to be "routine." The available information indicates that the work proposed at Port Washington is far from being a regular, customary, or standard undertaking for the purpose

of maintaining the plant in its present condition. Rather, this is a highly unusual, if not unprecedented, and costly project. Its purpose is to completely rehabilitate aging power generating units whose capacity has significantly deteriorated over a period of years, thereby restoring their original capacity and substantially extending the period of their utilization as an alternative to retiring them as they approach the end of their useful physical and economic life. The most important factors that would support these conclusions are outlined below.

a. The project would involve the replacement of numerous major components. The information submitted by WEPCO shows that the company intends to replace several components that are essential to the operation of the Port Washington plant. In particular, as noted above, WEPCO would replace the rear steam drums on the boilers at units 2, 3, 4, and 5. According to WEPCO, these steam drums are a type of "header" for the collection and distribution of steam and/or water within the boilers. They measure 60 feet long, 50.5 inches in diameter, and 5.25 inches thick, and their replacement is necessary to continue operation of the units in a safe condition. In addition, at each of the emissions units, WEPCO plans to repair or replace several other integral components, including replacement of the air heaters at units 1, 2, 3, and 4. The WEPCO also plans to renovate major mechanical and electrical auxiliary systems and common plant support facilities. The WEPCO intends to perform the work over a 4-year period, utilizing successive 9-month outages at each unit.

In its July 8, 1987 application for authority to renovate tothe Public Service Commission of Wisconsin (PSC), WEPCO described the life extension project and explained its purpose and necessity. The WEPCO took care to distinguish the proposed renovation work from routine maintenance that did not require PSC approval, explaining that:

> . . . [work items] falling into the category of repetitive maintenance that are normally performed during scheduled equipment outages do not require specific commission

approval and, accordingly, are not included in this application.

Thus, WEPCO's own earlier characterization of this project supports a finding that the planned renovations are not routine.

b. The purpose of the project is to significantly enhance the present efficiency and capacity of the plant and substantially extend its useful economic life. In its application to the PSC, WEPCO pointed out that due to age-related deterioration, total plant capability had declined by 40 percent. The company noted that the currently planned retirement dates for the Port Washington units, as set forth in its Advance Plan filed with the State, ranged from 1992 to 1999. However, WEPCO asserted that "extensive renovation of the five units and the plant common facilities is needed if operation of the plant is to be continued." In any event, WEPCO stated that the renovation work would allow the Port Washington plant to generate power at its designed capacity until the year 2010, and thus "represents a life extension of the units."

In contrast, in its July 29, 1988 letter to EPA headquarters (pages 9-13), WEPCO characterized the renovation work as the timely, routine correction of equipment problems--principally, the steam drum cracks. However, the information presented leads to the conclusion that this is not the case. While replacement of the steam drums is necessary to restore lost generating capacity, that is not the only work proposed to be done. Based upon maximum capacity figures for past years, it appears that the units had experienced deterioration in physical generating capacity even prior to the discovery of the steam drum cracks in 1984. Thus, WEPCO proposes a wide-ranging project encompassing a broad array of tasks that would not only correct the steam drum problem, but correct other age-related deterioration that is essentially independent of the steam drums. Such other work (e.g., replacement of air handlers) apparently is also necessary as a practical matter to restore original nameplate capacity. Thus, it appears that even if WEPCO had undertaken this renovation work immediately following discovery of the steam drum cracks, it would have been proper to characterize the proposed work as a nonroutine life extension project.

c. The work called for under the project is rarely, if ever, performed. The WEPCO's application to the PSC asserted that the work to be performed under the life extension project was not frequently done:

> Generally, the renovation work items included in this application are those that would normally occur only once or twice during a unit's expected life cycle.

The EPA asked WEPCO to submit information regarding the frequency of replacement of steam drums, the largest category of

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1It is important to note in this regard that not all renovation, repair, or "life extension" projects would properly be characterized as modifications potentially subject to PSD and NSPS. For example, nonroutine repairs to correct unexpected equipment outages, even of major components such as steam drums, would not be subject to NSPS if they did not increase the maximum capacity of the affected facility as it existed prior to the outage. Conversely, undertaking a program of repair and maintenance properly characterized as routine would not subject a facility to the Act's requirements.

work item called for under the project. WEPCO reported that to date, no steam drums have ever been replaced at any of its coal-fired electrical generating facilities. WEPCO did point out that it had replaced other "headers" comparable in design pressure and function. However, the largest of these was 16 inches in diameter, and EPA does not believe that they are comparable in diameter, wall thickness, function, or importance to the rear steam drums at Port Washington.2

d. The work called for under the project is costly, both in relative and absolute terms. The latest information supplied by WEPCO is that the renovation work at Port Washington will cost $87.5 million, of which at least $45.6 million is designated as capital costs.3 The WEPCO reports that, in terms of annualized costs, the renovation project will cost $7.8 million, as compared to $51.6 million for a new 400 megawatt plant. Thus, renovation costs represent approximately 15 percent of replacements costs.

2. Change in the Method of Operation

The renovation work at Port Washington would not constitute a "change in the method of operation" within the meaning of the PSD regulations. However, it is clear that the "physical change" and "operational change" components of the "major modification"

2The WEPCO's July 29, l988 letter to EPA stated (on page l3) that after further investigation, the company "learned of several examples" of steam drum failure and replacement. However, WEPCO provides no further details, other than noting that in one instance, the drum failed during initial testing and was replaced. Replacement of a failed component at a new facility presumably would not increase emissions from the facility, and probably would be viewed as routine if the alternative was to forego operation of that new facility. Under such circumstances, it is unlikely that the replacement would trigger the Act's requirements.

3The WEPCO's July 8, 1987 application to the PSC included a project cost estimate of $83.9 million, of which $45.6 million was designated as capital costs. A more recent cost estimate provided to EPA by WEPCO indicates that several work items are now deemed unnecessary, such that the cost of the original project is now estimated at $70.5 million. However, all but $89,000 of these reductions are designated as "maintenance" items. The recent submission also relates that the scope of the original project has now been expanded to include flue gas conditioning equipment and associated air heater work costing approximately $17 million. Although WEPCO has not broken down these additional costs into capital and maintenance (or "expense") expenditures, it would appear that most, if not all, of this additional work would be classified as capital costs. Thus, it is highly likely that actual capital costs would be significantly higher than $45.6 million.

definition are discrete and independent. Thus, as explained below, PSD still applies if there is a physical change that will significantly increase net emissions.

In addition, the regulations exclude from the definition of physical or operational change "an increase in the hours of operation or in the production rate" [see 40 CFR 52.21(b)(2)(iii)(f)]. The preamble to the rule [45 FR 52676, 52704 (August 7, 1980)], makes it clear that this exclusion is intended to allow a company to lawfully increase emissions through a simple change in hours or rate of operation up to its potential to emit (unless already subject to any federally enforceable

limit) without having to obtain a PSD permit. Thus, emissions

increases at Port Washington associated with increased operations would not, standing alone, subject WEPCO to PSD requirements. However, as discussed in greater detail below, the exclusion for increases in hours of operation or production rate does not take the project beyond the reach of PSD coverage if those increases do not stand alone but rather are associated with non-excluded physical or operational changes.

In its March 17, 1988 letter to Region V and its July 29, l988 letter to EPA Headquarters, WEPCO asserted that the exclusion for increases in operational hours or production rate also would serve to render PSD review not applicable to the renovation work proposed at Port Washington because the project's purpose was to restore the original design capacity of 80 megawatts per unit, but not to exceed that level. However, a plant's original design capacity is irrelevant to a determination of PSD applicability.

B. Significant Net Emissions Increase

Under the PSD regulations, whether the life extension project at Port Washington would result in a "significant net emissions increase" depends on a comparison between the "actual emissions" before and after the physical changes resulting from the renovation work. Where, as here, the source has not yet begun operations following the renovation, "actual emissions" following the renovation are deemed to be the source's "potential to emit" [see 40 CFR 52.21(b)(21)(iv)]. Apparently, there would be a "significant net emissions increase" within the meaning of the PSD regulations as a result of the proposed renovations as currently planned, because potential emissions after the project--reflecting the restoration of 80 megawatt capacity at each unit--would greatly exceed representative actual emissions prior to the physical changes. (The fact that the project is intended to \restore the plant's original design capacity is irrelevant to that calculation)4 If this is so, the project would be a "major modification" subject to PSD review. However, PSD applies on a pollutant-specific basis, and EPA has not been furnished with adequate data regarding the impact of the proposed renovations on the various pollutants to determine whether a significant net emissions increase would indeed occur for any pollutant. Such data must be provided before EPA can make a final determination of PSD applicability.

It is important to note in this regard that WEPCO, at its option, could "net out" of PSD review by accepting federally enforceable restrictions on its potential to emit after the renovation. This could occur through enhancement of existing pollution control equipment, addition of new equipment, acceptance of federally enforceable operational restrictions, or some combination of these measures, limiting potential emissions to a level not significantly greater than representative actual emissions priorto the renovations. Theoretically, WEPCO could minimize the needed restrictions on its potential to emit following the renovations if it could show that some period other than the most recent two years is "more representative of normal source operation" [see 52.21(b)(21)(ii)]. (Obviously, such a showing would be most important with respect to unit 5, because it has been shut down and has had zero emissions since 1985.) Since these matters are within WEPCO's control, you should advise the company to enter discussions with Region V and Wisconsin, as appropriate, if WEPCO desires to "net out" of PSD review. The WEPCO also argued in its July 29, 1988 letter, at pages 33-41, that even if EPA is correct that the Port Washington life extension project would involve physical changes within the meaning of the PSD regulations, any emissions increases would be due to increased production rates or hours of operation rather than higher emissions per unit of production. Therefore, WEPCO contends that these increases should be excluded from consideration in determining whether a net significant emissions

_____

4The WEPCO also contends (July 29, 1988 letter, page 35) that EPA should instead compare representative actual emissions prior to the change with "projected" actual emissions after the renovations. The PSD regulations provide no support for this view. Where, as here, a source is not currently subject to a PSD permit containing operational limitations, EPA must presume that the source will operate at its maximum capacity and, hence, its maximum potential to emit. However, as discussed below, a source is entitled to reduce its potential to emit by embodying its "projections" of future emissions in federally enforceable restrictions on its operations that may serve to lawfully avoid PSD review.

increase and, hence, a major modification, would occur. The WEPCO is incorrect in this regard.

As noted above, the exclusions cited by WEPCO are intended to apply where a source increases emissions by simply combusting a larger amount of fuel, or processing a larger amount of raw materials during a given time period, or by expanding its hours of operation "to take advantage of favorable market conditions" (see 45 FR 52704). In this instance, however, it is obvious that WEPCO's plans to increase production rate or hours of operation are inextricably intertwined with the physical changes planned under the life extension project. Absent the extensive renovations proposed at Port Washington, WEPCO would have little market incentive to, and in part would be physically unable to, increase operations at these aged and deteriorated facilities which, absent the renovations, would likely be retired from service in the near future. Thus, WEPCO's plans call for precisely the type of "change in hours or rate or operation that would disturb a prior assessment of a source's environmental impact [and] should have to undergo [PSD review] scrutiny" (see 45 FR 52704). Conversely, accepting WEPCO's interpretation of the major modification regulations would serve to exclude from consideration all physical or operational changes except those which cause increased emissions per unit of production. Clearly, EPA never intended this result. It would allow, through substantial capital investment, significant expansion of the pollution-emitting capacity and longevity of major industrial facilities without PSD review of the impacts on air quality and opportunities for future economic growth.

C. Baseline Date

The November 9, 1987 letter from the Wisconsin Department of Natural Resources to Region V asked whether a complete March 28, 1986 PSD permit application for certain work at Port Washington triggered the PSD baseline date, despite the fact that the permit was never issued. The answer to this question is yes. Baseline dates are triggered by the first complete application and remain in effect regardless of whether the application is revised or withdrawn, or whether the permit is finally issued and the source constructed or modified.

III. NSPS Applicability

The Port Washington renovations are subject to the Act's NSPS if they constitute "modifications" within the meaning of section 111 and 40 CFR Part 60. Under 60.1, the NSPS applies to modifications at an "affected facility." Each unit at Port Washington is properly characterized as an "affected facility" subject to the NSPS at 40 CFR Part 60, Subpart Da, which applies to electric utility steam generating units [see 60.40(a)]. Pursuant to 60.14(a), a modifi- cation for NSPS purposes is defined as "any physical or operational change to an existing facility which results in an increase in the emission rate to the

atmosphere of any pollutant to which a standard applies." Increase in emission rate is in turn defined as an increase in kilograms per hour (kg/hr) [see 60.14(b)].

Pursuant to longstanding EPA interpretations, the emission rate before and after a physical or operational change is evaluated at each unit by comparing the hourly potential emissions under current maximum capacity to emissions at maximum capacity after the change. In addition, under the Act's NSPS provisions, only physical limitations on maximum capacity are considered in determining potential emissions at power plants. Thus, any prospective changes in fuel or raw materials accompanying the physical or operational change are not considered in determining maximum capacity. Consequently, 60.l4(b)(2) requires that, in conducting emissions tests before and after a change to determine whether an increase in emission rate has occurred, "operational parameters" which may affect emissions must be held constant. Fuel and raw materials are "operational parameters" for this purpose. Similarly, 60.14(e)(4) provides that use of an alternative fuel or raw material which the existing facility was designed toaccommodate before the change would not be considered a modification. Thus, for example, a physical change which increases the maximum capacity of the facility would have a corresponding increase in the sulfur dioxide emissions if the facility used fuel with the same sulfur content before and after the change. Such a prospective increase cannot be offset by instead using fuel with a lower sulfur content after the change, because, under the regulations, the facility would always have the option of changing back to the higher sulfur-content fuel at a later date without triggering a modification for NSPS purposes. However, any offsetting reductions in emission rate caused by the concurrent addition of pollution control equipment would be considered in determining whether a physical or operational change results in an increase in emission rate.

The WEPCO contends (July 29, l988 letter, at pages 20-27) that baseline capacity for the purpose of determining whether an increase in emission rate occurs for purposes of an NSPS modification is the original design capacity of the facility. This is incorrect. The thrust of the NSPS modification provisions is to compare actual maximum capacity before and after the change in question. Thus, original design capacity is irrelevant. The provision in 40 CFR 60.l4(b)(2) for manual emission tests to determine whether an increase has occurred clearly contemplates that tests will be done just prior to and after the physical or operational change. The original design capacity of a unit, to the extent it differs from actual maximum capacity at the time of the test due to physical deterioration--and, hence, derating--of the facility, is immaterial to this calculation.

A. Physical or Operational Change

As with the Act's PSD provisions, a modification occurs for NSPS purposes, if there is either a physical or operational change [see 40 CFR 60.14(a)].

1. Physical Change

As is the case under the PSD provisions, the proposed renovations at Port Washington would constitute a physical change for NSPS purposes, at least at units 2, 3, 4, and 5. The WEPCO would need to supply more information, if EPA is to make a definitive determination as to unit 1.

The rear steam drums are part of the steam generating unitwhich constitutes the "affected facility" within the meaning of 40 CFR 60.41(a), and the drum replacements at units 2, 3, 4, and 5 are integral to the planned increase in maximum capacity, which is the purpose of the life extension project. With respect

to unit 1, other physical changes would increase maximum capacity from 45 to 80 megawatts. However, there is some question whether those changes, in significant part, would occur at the steam generating unit or will be limited to the turbine/generator set, which is not part of the affected facility. We suggest that you pursue this matter with WEPCO to the extent necessary to determine NSPS applicability regarding unit 1.

As with PSD, the NSPS regulations exclude routine maintenance, repair, and replacement [see 60.14(e)(2)]. However, the renovations at the Port Washington steam generating units are not routine for NSPS purposes for the same reasons--detailed above--that they are not routine for PSD purposes.

2. Operational Change

Operational changes include both increases in hours of operation and increases in production rate. Section 60.14(e)(3) provides that an increase in hours of operation is not, by itself, a modification. However, an increase in production rate at an existing facility constitutes a modification, unless it can be accomplished without a capital expenditure on that facility [see 60.14(e)(2)].

It is highly likely that the life extension project at Port Washington constitutes an operational change under this standard, for two reasons. First, restoring nameplate capacity at units 1, 2, 3, and 4 presumably entails, among other things, changes that will allow the units tocombust a larger amount of fuel at maximum capacity through operation at higher working pressures than the units have been able to accommodate in recent years. In the case of unit 5, the renovations presumably involve an increase over zero fuel and pressure. These changes constitute an increase in production rate within the meaning of the regulations. Second, as noted above in the discussion of PSD applicability, this increase in production rate entails substantial investments to improve the capital stock at each affected facility. It appears that these investments are large enough to qualify as "capital expenditures" under the formula specified in 60.2, although WEPCO should be asked to supply actual calculations should this become necessary to determine NSPS applicability.

B. Increase in Emission Rate

It seems clear that, absent some creditable offsetting changes, the increases in maximum generating capacity proposed for each of the Port Washington units would represent an increase in the hourly potential emission rate for each pollutant to which a standard applies over the emission rate prior to the renovation. As noted above, burning cleaner fuels would not be creditable. Similarly, voluntarily restricting the production rate following the renovations also would not be creditable for NSPS purposes, because WEPCO could, at a later date, increase production without triggering NSPS [see 40 CFR 60.14(e)(2)]. Accordingly, to avoid triggering NSPS, WEPCO would need to install additional air pollution control equipment, or upgrade existing equipment, to offset the potential emissions increases, such that no increase would occur at maximum capacity. The information submitted indicates that WEPCO may plan some enhancement of the current control equipment, but it is unclear whether this would be adequate to prevent an increase in emission rates. As with PSD applicability, such steps can lawfully avoid NSPS requirements. Accordingly, you should advise the company that it should address these contingencies if it desires EPA to rule on whether WEPCO can avoid NSPS requirements in this fashion.

C. Reconstruction

Based upon data provided by WEPCO, it seems that the Port

Washington renovations would not qualify as a "reconstruction" for NSPS purposes under 40 CFR 60.15, because the capital cost for the upgrades to each of the five units, while substantial, apparently is less than 50 percent of the fixed capital cost of constructing a comparable, entirely new steam generating unit [see 60.15(b)(1)]. However, the modification and reconstruction provisions of NSPS are independent. The former provisions are intended to apply in circumstances where physical or operational changes which increase emissions make NSPS coverage appropriate at levels well below 50 percent of the capital cost of a replacement unit. Conversely, the reconstruction provisions are aimed at changes to an existing unit irrespective of associated emissions

increases, but trigger NSPS requirements only if the higher 50 percent level is reached. Thus, the suggestion made by WEPCO in its July 29, l988 letter (at pages l4-l5) that EPA must undertake rulemaking to amend the reconstruction regulations before NSPS could be applied to the Port Washington project is not well taken.

IV. Conclusion

In adopting the PSD and NSPS programs, Congress sought to focus air pollution control efforts at an efficient and logical point: the making of long-term decisions regarding the creation or renewal of major stationary sources. The Port Washington life extension project, as it has been presented to EPA, would involve a substantial financial investment at pollution-emitting facilities that may significantly increase potential emissions of air pollutants over a period well beyond the current life expectancy of those facilities. If the additional factual information called for in this memorandum shows that emissions increases would indeed result from this project, the project would be subject to PSD and NSPS requirements. Such a result would be in harmony with the broad policy objectives that Congress intended to achieve through these programs.

cc: Gerald Emison, OAQPS
Alan Eckert, OGC

bcc: G. Foote, OGC
L. Wegman, OAR
J. Seitz, SSCD
M. Alushin, AED
Air Branch Chief, Regions I-X
Regional NSR Contacts, Regions I-X
J. Calcagni, OAQPS
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Rose Romer
Rennan. Hopkins

Ohio EPA
Division of Air Pollution Control

inter-office communication

to:	LAA Directors, DO Unit Supervisors and all permit review staff
from:	Bob Hodanbosi, Chief, DAPC
subject:	Emission calculations for printing presses
date:	November 21, 1996

The Printing Industry of Ohio (PIO) has recently published a self help manual entitled "ENVIROPRINT" which explains regulatory requirements for printing companies. The ENVIROPRINT project was jointly funded by the Ohio Environmental Education Fund, Ohio Air Quality Development Authority, and PIO and has received the support of Director Schregardus. The manual is designed to explain multi-media compliance issues in a plain language, easy to understand format.

The chapter dealing with air pollution regulations concentrates on calculating potential emissions from printing presses using materials tracking and equipment utilization worksheets. The emission calculation methods found in ENVIROPRINT involve the use of ink solvent retention factors of 20% for heatset lines, 95% for non-heatset, sheetfed lines and also have emission factors for low vapor pressure clean-up solvents. These calculation methods are based on U.S. EPA's 1993 CTG and ACT documents for offset lithographic printing and should be considered valid. In fact, some of these factors and emission calculation methods have already been incorporated into recent permits to operate.

This is especially important for non-heatset or sheetfed printing presses which qualify for the less than 3 TPY exemption per OAC Rule 3745-31-03(A)(1)(s). Non-heatset lithographic printers make up the vast majority of the estimated 2500 printing companies in Ohio and many of these will qualify for the PTI/PTO exemption.

An Engineering Guide is being developed for non-heatset printing lines. Engineering Guide #56 for heatset web-offset lines is also being revised based on the ACT and CTG documents. Until these are completed, the following percentages should be used for printing press emission calculations:

Lithographic Printing Lines

Heatset Web Offset Presses:

1. **Inks.** Assume 20% of the ink solvent is retained in the web or substrate and the remaining 80% goes to the dryer.

2. **Fountain solution.** For alcohol substitutes only, assume 30% fugitive and 70% goes to the dryer.

3. **Blanket Wash.** For automatic blanket wash systems, assume 60% of the solvent is fugitive and 40% goes to the dryer.

Non-heatset, Sheetfed or Web Presses:

1. **Inks.** Assume 95% of the ink solvent is retained in the web or substrate and 5% is emitted.

2. **Fountain solution.** Assume all fountain solution VOC is emitted.

Cleanup operations (all presses):

1. If cleanup is done by hand wiping and closed containers are used to store the cleanup cloths, assume 50% of the solvent is retained in the cloths and 50% is emitted if the solvent has a vapor pressure of 10 mm Hg or lower at 20 degrees Celsius (68 deg. F).

If you have any questions regarding emission calculations for printing lines, please contact Rick Carleski at (614) 728-1742 or Tom Kalman at (614) 644-3598.

Thank you.

cc: Jim Orlemann, DAPC
Mike Hopkins, DAPC
Bill Stickney, PIO

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State of Ohio Environmental Protection Agency

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Ref- def of Mai ch 31

George V. Voinovich
Governor

To: Distribution

From: Bob Hodanbosi Chief, DAPC, Ohio EPA

Re: "Replacement" Source Guidance - DRAFT - For Comment

Date: March ~~6~~ 22, 1995

The following policy is in draft form. This draft policy is being issued to solicit comments from all parties involved. Any comments on this draft policy should be submitted to Mike Hopkins, Manager, Air Quality Modeling and Planning Section, Ohio EPA, PO Box 1049, Columbus, Ohio 43216. Comments received prior to April 30, 1995 will be considered prior to final issuance of the policy.

Background: In March 1994 the Ohio Supreme Court issued a decision in State v. National Lime & Stone Company that affected our interpretation of when an entity putting in a piece of equipment is required to have a permit to install. The court stated that:

> A like-kind replacement of a piece of equipment that is a component of a complex manufacturing operation involving the emission of an air contaminant does not constitute "the installation of a new source of air pollutants" within the meaning of OAC Rule 3745-31-02(A).
>
> 68 Ohio St. d at 377.

Additionally, the Supreme Court stated

> In considering the parties' contentions, the trial court determined that Ohio Administrative Code 3745-31-02(A) does not govern the **replacement** of any air contaminant source, but rather requires a PTI only for the **installation** of a new source of air contaminants or the **modification** of an air contaminant source. The trial court further concluded that the term "replacement" could easily have been included in the rules, but, since it was not the doctrine of expressio unis est exlusio alterius applies.
>
> 68 Ohio St. d at 381-82

Guidance:

The practical effect of this decision will come when you inspect a facility and find a new piece of equipment that the owner

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claims is merely a replacement for a prior piece or when a company owner asks you whether or not he needs a PTI for a particular piece of equipment and you discover it replaces an existing piece of equipment.

In both cases the analysis is the same. The first question to ask is: Leaving the question of replacement entirely aside, does the installation of this equipment fit within our definition of either "install" a new source or "modify" an existing one. If the answer is "yes" and no exemption applies, then you apply the following criteria:

1. Is the piece of equipment free-standing, i.e., not connected to any other part of the operation like a boiler to heat the office buildings? This evaluation should be similar to the bottlenecking evaluation. Can the piece of equipment operate on its own? Or, is it part of a complex operation in which all components of the complex operation must operate together?

   If replaced operation is an independent operation then a PTI is required. If not, go on to the next question.

   The following are examples:

   a. *Printing lines typically consist of one or more print stations. Each print station cannot operate on its own - it needs the rest of the line (paper unrolling, paper cutting, ovens, paper rolling, etc.) in order to operate. In this case, the replacement of a printing station, if it met the additional tests described below (not a major modification, no new emissions, no increase in allowables, etc.), would not need a permit to install.*

   b. *In the National Lime and Stone case, a rock crusher was replaced in a rock crushing and sizing line. The rock crusher was designed as part of the complex operation - the crushing and sizing line. The rock crusher was not designed to operate independently and instead was designed to operate as part of the line. The court decided that this was part of a complex operation which was a replacement and, because it met the additional test described below, did not need a permit to install.*

   c. *Take the case of a coal-fired boiler which provides process steam to a manufacturing operation. Boilers in this case typically operate independently (they often start-up prior to any manufacturing and shutdown before manufacturing is complete). If a company wants to replace this type of boiler, because it is an*

independent operation, they must obtain a permit to install.

d. *Take the example of a burner in a bake-off oven. A bake-off oven typically has multiple burners, conveying equipment, and exhaust equipment. The burner would be considered a piece of equipment in a complex manufacturing operation (emissions unit). The burner would not operate independently of the oven. If the company wants to replace the burner and it meets the additional criteria described below, then no permit to install is required.*

2. Is the emissions unit a significant air pollution source per OAC rule 3745-31-01(O)? If no, go on to the next question. If yes, does any increase in emissions result in ambient impacts greater than the modification thresholds under OAC rule 3745-31-01(J)(1)(b)? If yes, then a permit to install is required. If no, go on to the next question.

Discussion:

OAC rule 3745-31-01(O) defines what is considered a "significant air pollution source." This evaluation should be done before the modification and should look at the existing emissions unit, not just the replaced part of the emissions unit. The significants cutoffs are as follows:

Particulate Matter	*100 tons per year*
Sulfur Dioxide	*100 tons per year*
Nitrogen Oxides	*100 tons per year*
Organic Compounds	*100 tons per year*
Carbon Monoxide	*1000 tons per year*
Lead	*2 tons per year*

If the emissions unit is considered a significant air pollution source, then modeling must be done to determine if the impact of the increase of emissions is greater than the ambient impact threshold levels. This modeling should follow Ohio EPA modeling guidelines. These threshold levels can be found in OAC rule 3745-31-01(J)(1)(b). If the ambient impact due to the change is greater than the threshold levels, then a permit to install is required.

3. Is the modification a major modification under federal rules as per OAC rule 3745-31-(J)(1)(a)(iv)? Remember, the federal rules have their own methods of deciding if a modification triggers NSR, NSPS, or NESHAPS. If it is a major modification under federal rules, then a permit to install is required. If not, then go on to the next question.

4. Did the replacement component relocate? If yes, determine if the portable source policy (Engineering Guide number 44) requires a permit to install. If the engineering guide requires a permit to install, then a permit to install is required. If the engineering guide does not require a permit to install, then go on to the next question.

5. Did the change result in the emission of any type of air contaminant which was not previously emitted? If yes, then a permit to install is required. If no, then go on to the next question.

6. Is there an increase in the allowable air contaminant emission rate under any applicable law? (Note: Extremely minor increases should not be considered unless they result in the emissions unit no longer being in compliance with existing emissions limits.)

   If yes, a PTI is required. If no, no permit to install is required.

   An example of this evaluation is as follows:

   Company Pollute, Inc. operates a widget operation which is regulated under OAC rule 3745-17-11. This process has a process weight rate of 60 pounds per hour. The company proposes to replace a part of the widget operation (a complex operation) which results in a new process weight rate of 62 pounds per hour (a minor increase). The allowable emissions are based on Table I of rule 3745-17-11. Under this table, the original allowable is 0.551 pounds per hour. This limit is listed in their permit. At 62 pounds per hour process weight rate the allowable based on Table I is also the same - 0.551 pounds per hour. In this case no permit to install is needed if it meets the other criteria.

Attached is a flow chart which graphically illustrates this guidance. Any questions or comments concerning this policy should be directed to Mike Hopkins, Manager, Air Quality Modeling and Planning Section, Ohio EPA.

MH/
\wp\policy\natlime

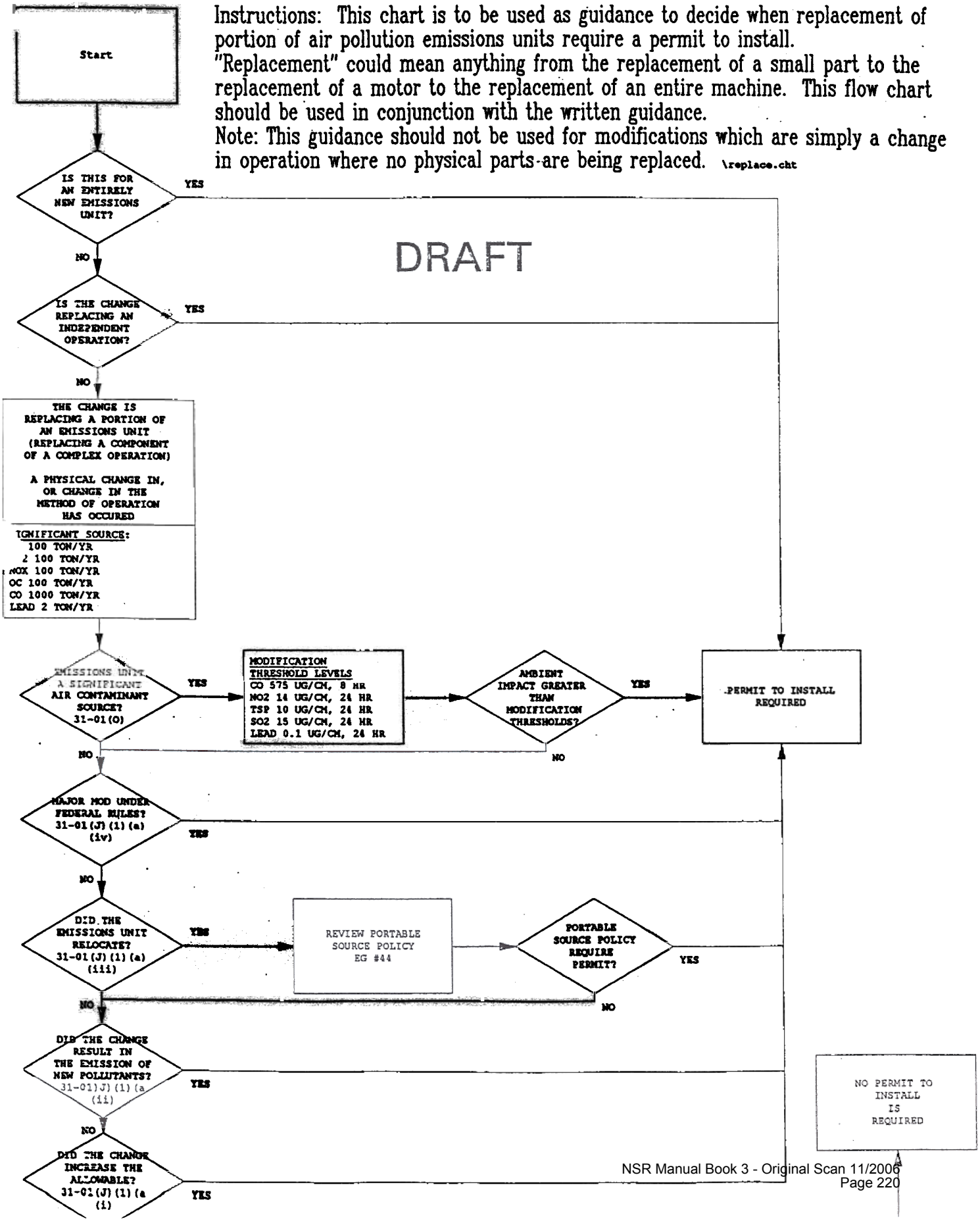
Attachment

Distribution:

All DO/LAA Air Unit Supervisors
Bob Hodanbosi, DAPC
Jim Orlemann, DAPC
Tom Rigo, DAPC
Jim Braun, DAPC
Misty Parsons, DAPC
Alan Lloyd, DAPC
Jeanne Mallett, OEPA Legal
DAPC Air Lines
DAPC BBS

Ohio EPA DAPC Replacement Guidance Flow Chart

Instructions: This chart is to be used as guidance to decide when replacement of portion of air pollution emissions units require a permit to install.
"Replacement" could mean anything from the replacement of a small part to the replacement of a motor to the replacement of an entire machine. This flow chart should be used in conjunction with the written guidance.
Note: This guidance should not be used for modifications which are simply a change in operation where no physical parts are being replaced. \replace.cht



8/17/94 - Misty, Jim, Alan,
Please review this and
prepare comments. We will
need to prepare guidance
MR

cc Misty Parsons
Jim Brown
Alan Lloyd

Attorney General
Lee Fisher

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MEMORANDUM

Bob Hodanbosi, OEPA/DAPC
Jim Orlemann, OEPA/DAPC
Tom Rigo, OEPA/DAPC
Jeanne Mallett, OEPA/Legal

FROM: Christopher Korleski, Air Program Supervisor, EES

DATE: June 9, 1994

National Lime & Stone Company/Review of Decision

It is the opinion of the Supreme Court, as stated in the syllabus of the opinion, that:

> Like-kind replacement of a piece of equipment used in manufacturing operations involving emission of an air contaminant does not constitute "the installation of a new source of air pollutants" within the meaning of OAC Rule 3745-31-02(A).

68 Ohio St. 3d at 377. Stated somewhat differently, the Court stated that:

> A like-kind replacement of a piece of equipment that is a component of a complex manufacturing operation involving the emission of an air contaminant does not constitute "the installation of a new source of air pollutants" within the meaning of OAC Rule 3745-31-02(A).

Id.

Additionally, the Supreme Court stated:

> In considering the parties contentions, the trial court determined that Ohio Administrative Code 3745-31-02(A) does not govern the *replacement* of any air contaminant source, but rather requires a PTI only for the *installation* of a new source of air contaminants or the *modification* of an air contaminant source. The trial court further concluded that the term "replacement" could easily have been included in the rules, but, since it was not, the doctrine of *expressio unius est exclusio alterius* applies. We agree. (underlining added).

Id. at pp. 381-2.

A. Free-standing sources v. "Components of Complex Manufacturing Operations"

The Supreme Court does not expressly hold that the like-kind replacement of a source of air contaminants is not an installation, but rather that the replacement of a "piece of equipment that is a component of a complex manufacturing operation involving the emission of an air contaminant" does not constitute installation. The majority did not look at the definition of "air contaminant source" nor look at the issue of whether or not it was an "air contaminant source" which was actually replaced. Rather, without much explanation, and without addressing the issue of whether or not the replaced mill was an air contaminant source, the Court simply became fixated on the concept that there had been a replacement of a piece of equipment that was a component of a complex manufacturing operation. Implicitly, the Court seems to treat the entire facility as a source and not as a combination of several individual air contaminant sources. Further, the Court provided no elucidation of the concept of a "complex manufacturing operation".

Based on the Court's focus on "complex manufacturing operation", Ohio EPA could perhaps make a distinction between sources which are pieces of equipment that are components of complex manufacturing operations, and sources which are more of a "free-standing" (my term), discrete, and separable nature. Based on this distinction, Ohio EPA could potentially argue that a like-kind replacement of some sort of "free-standing" source would, even under the Supreme Court's opinion, still require a PTI prior to installation. However, if the Agency attempts to impose PTI liability when such a "free-standing" source is replaced, the business entity will likely argue that such a construction is an overly-semantic one and that the economic and business efficiency principles underlying the Supreme Court's decision should apply whenever there is a like-kind replacement of a source,

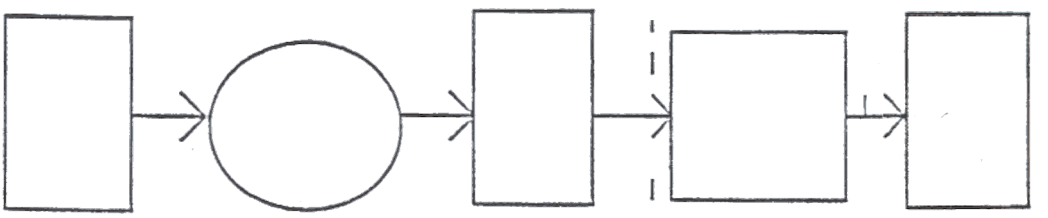
regardless of whether it is "free-standing" or a "component source". Additionally, such an entity would surely focus on the Supreme Court's express assertion on pages 381-2 of the opinion that the concept of "replacement" simply does not fall within the definition of installation within 31-02(A). Since that rule interpretation would apply regardless of whether it was a free-standing source or a component source, the entity would have a good argument that a PTI was not required. Further, I wonder if there are many such "free-standing" sources and if in fact most businesses could credibly argue that their sources are "components" of a complex manufacturing operation.

B. Like-Kind Replacement

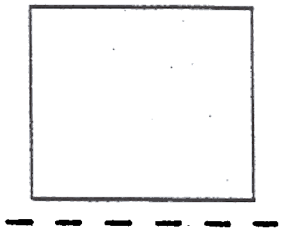
The most important concept in the decision is the Supreme Court's use of the phrases "like-kind replacement" and "replacement". First, as noted above, the Court expressly stated that it views "replacement" as being different from "installation". However, by focusing on "like-kind" replacement, the Court seems to be suggesting that a "replacement" only occurs if the replacement device is of a "like-kind" to its predecessor. The question arises: What exactly is "like-kind" replacement? Under the facts of this particular case, the replacement piece of equipment was not exactly identical with its predecessor. Indeed, on page 378 of the Opinion, the Court noted that the replacement mill differed from the prior mill, although the Court emphasized that the differences were "only" in terms of the number and size of the rollers and grinding ring. The Court, on page 381 of the Opinion, however, seems to have concluded that the new mill was "virtually identical" with the prior mill. At any rate, it seems that in interpreting the applicability of the decision in a given case, the Agency must closely compare any replacement source with its predecessor and focus on the degree of similarity. Potential factors to be considered could include the source's function, dimensions, rated capacity, potential to emit, actual emissions, types of pollutants emitted, etc.

In thinking about this issue of what constitutes "like-kind" replacement, I thought it would be helpful to set forth a number of hypotheticals in order to focus the Agency's thinking on this matter. First, imagine the following two general scenarios:

SCENARIO A: Complex Manufacturing Operations



SCENARIO B: Free-Standing Source



Whether the source in question is a "component" source or a "free-standing" source, as diagrammatically represented above, I believe the following hypotheticals will illustrate the issues which the Agency must consider in determining if there has been a like-kind replacement such that no PTI is required pursuant to the language of the decision.

For purposes of the following hypotheticals, assume that there is a business entity of some sort that intends to replace the air contaminant source which is bounded by the dotted line. Let's assume that the existing source has potential emissions of particulate matter of 50 tons per year, allowable emissions of 30 tons per year and actual emissions of 25 tons per year. Let's assume the existing source is manufactured by X-brand, is blue in color, and consists of three rotating interior components known as widgits. Under the following scenarios, the question to keep in mind is whether or not a like-kind replacement has occurred.

Hypothetical A:

Assume that the existing source, as described above, is replaced by a source that is manufactured by the same company, is the same color, has the same kind and amounts of interior widgits and has the same potential to emit particulate matter. Further, assume that the source will be operated in the same manner as the predecessor source and that there will not be a change in actual emissions.

Evaluation:

This would appear to be an "identical" source, and it appears that the installation of this source would not, pursuant to the decision, require the application for and issuance of a PTI. This presupposes, however, that the entity would operate this replacement source at the same level of actual emissions, and that there would be no need to consider whether or not the allowable emissions were going to change.

Hypothetical B:

Hypothetical B raises the question of what would happen in the event

the entity installed the physically identical source described under Hypothetical A, but increased its actual emissions from the source to such a level that they exceeded the existing allowable emissions. Under such a scenario, several questions are raised. First, what would be the legal effect of increasing actual emissions to a level greater than allowable emissions? Second, assuming the source had been operating pursuant to a PTO wherein the allowables were expressed, there would be a violation of the PTO. Third, since the emissions from the replacement source were greater than those from the predecessor source, it could be argued that this in fact was not a "like-kind" replacement, i.e., because the replacement source was contributing emissions at a greater level than the predecessor source, this did not simply constitute a replacement of one identical and identically-operated source for another. While, from an environmental standpoint, it makes sense to look at the actual (or potential) emissions from a source in determining whether or not it is like-kind, please note that there is no basis for such a distinction in the Supreme Court's opinion, as the Supreme court did not address emission levels at all. It appears that in using the phrase "like-kind", the Court was focusing on the physical structure of the replacement source and not its resultant emissions. Nevertheless, I believe it makes sense for the Agency to view the potential and actual amounts and types of emissions from the new source as the fundamental criteria in determining whether or not a "like-kind" replacement has occurred.

Hypothetical C:

Let's assume the replacement source is not "virtually identical" to the prior source. Perhaps it is made by a different manufacturer, perhaps it uses a slightly different technology, or perhaps its internal workings are rearranged differently. The question is, does this constitute a like-kind replacement? Again, I think the Agency should look at any changes in emissions emanating from the replacement source. If there is an increase in potential or actual emissions such that the replacement source was exceeding its existing permit limitation or if there is a needed change in the allowable emissions it could be argued that this is not a like-kind replacement, and that therefore a PTI is necessary. (This hypothetical, like Hypothetical B, raises the question of whether a "modification" has occured such that a PTI would be required regardless of whether a "like-kind replacement" had occurred.

Hypothetical D:

However, what if the replacement source resulted in similar or less emissions than its predecessor source? Again, let's assume that the replacement source is not virtually identical in some physical respect. Nevertheless, despite some physical difference in the source, if the source has the same potential to emit and the same actual emissions as the predecessor source, and in fact there are not exceedances of the allowable emissions which were applicable to the predecessor source, then this does seem like a "like-kind" replacement of the

predecessor source. Consequently, under such a scenario, there would seem to be little reason to argue that a PTI was required. Alternatively, what if the replacement source actually resulted in lower emissions than those emitted by the predecessor source? In this hypothetical, both the emissions and the physical makeup of the source are different and it could be argued, on both these levels, that this is not a like-kind replacement. Nevertheless, because emissions are fewer, the business entity could argue that no PTI is required because the Agency's primary concern, i.e., increased emissions, was not applicable.

If the Agency agrees that the most fundamental component in determining whether a source is a "like-kind" replacement is the actual (or potential) emissions that will result therefrom, as opposed to its manufacturer, superficial appearance, internal workings, etc., then it appears a fundamental problem arises, i.e., how does the Agency know whether or not the source is in fact a like-kind replacement until it reviews a PTI application (which the entity will not even submit if the entity believes it is a like-kind replacement)? Does this approach create a scenario whereby the Agency wants a PTI application, but in a given instance may conclude that there has been like-kind replacement, and therefore, no actual PTI must be issued? Such an approach would conflict with industries' likely interpretation that if it meets the definition of like-kind replacement, as industry defines it (whatever that may be), no application need be submitted in the first place. It would appear that the Agency is going to have to put regulated entities on notice as to what it believes a like-kind replacement is and give industry some sort of notice. Otherwise, we will have the "chicken and egg" problem described above.

In looking at this issue as a whole, I believe it is important for Ohio EPA to consider whether the emissions that will actually enter the ambient air as a result of the Agency not being able to apply BAT to replacement sources are a serious threat to the maintenance or attainment of the ambient air quality standards. Assuming that "like-kind replacement" is synonymous with installing replacement sources which contribute emissions equal to those emitted by the predecessor source, can the Agency live with such replacement sources being installed without BAT?

Finally, I should point out that the Supreme Court's opinion is not a model of clarity, and that the Court did not appear to anticipate or be concerned about the difficulty the Agency would have in construing and interpreting the opinion. Consequently, given this lack of clarity (and some differences of opinion even in this Office alone about the meaning and effect of the opinion) it is impossible to simply tell you "what to do"on a generalized basis. Instead, it is my hope that this memo will serve to clarify the issues which I feel the Agency must consider in light of the decision and your environmental objectives. We remain willing to work

with you and provide you with counsel as you deal with the decision on a case-by-case basis, which is, I expect, the way in which the opinion will actually be implemented.

cc: Jack Van Kley, Chief, EES
Peggy Malone, AAG, EES
Gary Cox, AAG, EES
Chris Walker, AAG, EES

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
RESEARCH TRIANGLE PARK, NC 27711

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OFFICE OF
AIR QUALITY PLANNING
AND STANDARDS

RE: **New Web Address and On-line Data Entry for the RACT/BACT/LAER CLEARINGHOUSE (RBLC)**

The RBLC will be moving to a new Web address during the Christmas/New Years Holidays. If you currently have the RBLC Web site bookmarked, you need to be aware of this change. If you use the old address after the change you will get an error message because the old RBLC server will be off line. After the change, go to the Clean Air Technology Center (CATC) Web at < http://www.epa.gov/ttn/catc/ > to access the RBLC. Just click on the RBLC graphic at the bottom center of the CATC Home Page and you will go directly to the new RBLC address. You can either continue to access the RBLC Web through the CATC or you can bookmark the new RBLC Web site once you get there.

This move also will initiate some changes to the RBLC. One important change is the ability to enter data on the RBLC Web. Because this is a new data entry system, a new security system is required. To be able to enter data on the RBLC Web, your agency must submit a letter designating the person authorized to enter data. **Both new candidates and those who had been authorized to enter data under the old on-line Bulletin Board System (BBS) must submit a new authorization from their agency.** The authorization letter must be signed by the candidates supervisor, program manager, or agency director, and must be on agency letterhead. The letter must indicate the actual name of the person that will be entering data, and a password (8 or more alpha-numeric characters, case sensitive). For your convenience, this information may be submitted on the attached form. The completed form should be attached to your agencies authorization letter. Only authorized individuals will be allowed to enter and edit RBLC data for a specific agency on the RBLC Web. Send authorization letters to:

Mr. Joe Steigerwald (MD-12)
RACT/BACT/LAER Clearinghouse
U.S. EPA
RTP, NC 27711

If you have questions concerning this matter, call Joe Steigerwald at (919) 541-2736.

Have a great holiday season.

Bob Blaszczak
Clean Air Technology Center Program Manager

Enclosure

Internet Address (URL) • http://www.epa.gov
Recycled/Recyclable • Printed with Vegetable Oil Based Inks on Recycled Paper (Minimum 25% Postconsumer)

RACT/BACT/LAER Clearinghouse (RBLC)

To: Primary State/Local Contacts;

The Reasonably Available Control Technology (RACT) / Best Available Control Technology (BACT) / Lowest Achievable Control Technology (LAER) Clearinghouse Information System (RBLC) is moving to the World Wide Web (WWW) and closing the RBLC site on the Office of Air Quality Planning and Standards (OAQPS) Technology Transfer Network (TTN) Bulletin Board System (BBS). The TTN and RBLC BBS sites closed on November 12th, 1999. The significance of this is that authorized State/local agency users could directly input and change their RBLC determinations only through the RBLC BBS site. When the BBS site was closed this function was lost. However, do not despair! The new RBLC Web site will allow direct input and update capability to authorized State/local agency users.

The new RBLC Web will allow direct entry and update capability for State, local, and Regional air pollution control agencies. In order to directly enter and/or update data in the RBLC database your agency must designate the person who will enter the data and complete the lower portion of this form and return it to the Clearinghouse. Please note that the submittal of RBLC data summary forms will remain as an alternative to the direct entry of data; however, all agencies are encouraged to directly enter their determinations into the Clearinghouse.

To access the RBLC Web site go to <http://www.epa.gov/ttn/catc/> and click on the icon of the computer with RBLC on it's screen.

Please type or print the name, telephone number, and agency name of the person that will have update authority for the RBLC Web.

Name: _____ Telephone Number: _____

Agency Name: _____

Signature and Date: _____

Authorized RBLC Web updaters will need a RBLC Edit password. The password may be any combination of at least 8 alphanumeric characters. Controlling access to this password is very important because whoever uses this password may enter and/or alter your agency's RBLC data. Please enter the RBLC Edit password the authorized user will use here (remember, this will be case sensitive):

Authorized RBLC Edit Password: _____

Please sign and date this form and forward it to your supervisor. Please ask your supervisor to enter his or her name and telephone number and to sign and date this form.

Supervisor's Name (please print): _____

Supervisor's Signature and Date: _____

When completed, please return this form to: **Mr. Joseph Steigerwald**
RBLC
US EPA, MD-12
Research Triangle Park, NC 27711

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
RESEARCH TRIANGLE PARK, NC 27711

MAR 05 1999

OFFICE OF
AIR QUALITY PLANNING
AND STANDARDS

STATE, LOCAL AND REGIONAL OFFICE
NEW SOURCE REVIEW - RACT/BACT/LAER CLEARINGHOUSE
PROGRAM CONTACTS

Once again, it is time to finalize this year's (1999) edition of the RACT/BACT/LAER Clearinghouse (RBLC). You are requested to submit any new determinations not previously submitted to the Clearinghouse by May 1, 1999. You are encouraged to submit source specific RACT determinations and/or determinations not covered by existing EPA Control Technique Guidelines (CTG's) along with your BACT/LAER determinations. The RACT determinations which are covered by and consistent with EPA developed CTG's are not being requested since they would only duplicate the control levels specified as RACT in the CTG's. The non-CTG RACT rules may be entered directly in the RBLC Rule Data Base. Remember, Section 173(d) of the 1990 Clean Air Act requires that States submit LAER permit determinations to the RBLC.

Instructions for completing the "RACT/BACT/LAER DETERMINATION INPUT FORM" sheet are enclosed. The instructions include a copy of the input form. Please use the enclosed version of the form and discard previous outdated versions. Please refer to the current edition of the RBLC User's Manual for additional information as required. If you still need help completing the form or have any questions concerning the RBLC, contact me at (919) 541-2736. Copies of the data submittal forms and instructions are also available on the RBLC World Wide Web (WWW) site.

As an alternative to submitting forms, your agency can submit additions in two electronic formats. First, data may be entered directly into the RBLC data base while on-line with the RBLC Bulletin Board System (BBS) on the Technology Transfer Network (TTN) if your agency has a user authorized to enter information directly into the RBLC data base. Second, you may use the standalone version of RBLC on your PC and submit your determinations on a diskette. (See the enclosures for more information on this alternative.) The RBLC is currently working

on updating the data input system to support entering RBLC determinations directly from the Web. If everything goes as planned, authorized users will be able to enter their agency's new determinations using the Web sometime in the Fall of 1999. Once this capability is available, the RBLC will notify authorized users of its availability.

Completed forms must be submitted to:

RBLC, ITG, ITPID
U.S. EPA
MD-12
Research Triangle Park, NC 27711

The RBLC staff will be making a concerted effort to improve quality control for data entering the system, but we need your help. Please take the time to read the instructions and properly complete all applicable items on the determination input form. There have been a number of questions on the input forms in the past. The instructions enclosed address most of these. One critical item is the process type code. It is critical that you clearly indicate the process name and process type code. If these are not correct, vague or misleading, it will be extremely difficult to identify relevant data when searching the data base. Use the "note" portion of the form to clarify your determination, especially if the source falls into one of the "other" categories which are included as catch-alls under most process type category headings. Another area of change this year involves New Source Review (NSR) information. The RBLC is currently revising its data base structure to include NSR data elements. This effort is currently scheduled to be complete in the Fall of 1999. The RBLC will be sending out additional information on these changes and their effect on data entry requirements later this summer. Please stay tuned.

The 1999 document will include all new determinations submitted to the RBLC from June 1998 through May 1999. To assist each agency, a summary that lists the number of determinations that each State or EPA Region has submitted during the period 10/97 through 9/98 has been enclosed.

I have also enclosed a copy of the letter from Bob Blaszczak to the RBLC State and Local Agency contacts sent with last year's annual request for new RBLC determinations that will hopefully serve to remind users of the initiative started last year to make the data in the RBLC more comprehensive. Please take the time to read it over one more time.

Thank you for your cooperation.

Sincerely,

Joe Steigerwald
RACT/BACT/LAER Clearinghouse

6 Enclosures

Enclosure 1

Submissions to RBLC by EPA Region and State for the Period October 1, 1997 through September 30, 1998.

EPA Region	State (number submitted)	Total
1	CT(1), ME(2), RI(1)	4
2	NY(1), PR(3)	4
3	DE(2), VA(2), PA(5)	9
4	AL(14), FL(1), SC(2), TN(1)	18
5	IN(5), MI(1), MN(3), OH(1)	10
6	NM(8), LA(4)	12
7	IA(2), MO(38)	40
8	CO(12), MT(2), ND(2), WY(18)	34
9	CA(53)	53
10	OR(3)	3
Grand Total		187

Enclosure 2

Clean Air Technology Center (CATC)

RACT/BACT/LAER Clearinghouse (RBLC)

March 3, 1998

TO: State and Local Agency RBLC Contacts/Representatives

The RBLC has a new initiative and we need your help. The initiative is to make the RBLC data base complete, comprehensive and up to date. Many facilities have received permits that require BACT, LAER, or achieved precedent setting emission reductions, but are not reported in the RBLC database. The RBLC database is required by the Federal Clean Air Act and is maintained for your convenience and use, as well as for industry and consultants, to aid in preparing and reviewing permit applications. Your cooperation in submitting information to the Clearinghouse for these and other relevant determinations is requested.

You should note that Section 173(d) of the Clean Air Act requires State and local agencies to submit to the RBLC information on Lowest Achievable Emission Rate (LAER) determinations pursuant to State Implementation Plan (SIP) nonattainment area requirements. Proposed Federal Regulations regarding Prevention of Significant Air Quality Deterioration (PSD) would impose a similar requirement for Best Available Control Technology (BACT) determinations. Although submittal of Reasonably Available Control Technology (RACT) determinations is not required by statute or regulation at this time, sharing your key RACT determinations and rules with other State and local agencies through the Clearinghouse is encouraged. Note that the RBLC's regulation data base offers a single data entry opportunity for RACT requirements in lieu of multiple entries for sources subject to the same RACT rule.

We also are aware that emission sources may implement precedent setting levels of pollution prevention or control to avoid applicability of BACT and LAER new source review (NSR)

permitting requirements. Although these sources may not have triggered a formal major NSR process, they may have achieved or demonstrated the lowest emission rate for a particular type of source. Since information on this type of air pollution prevention or control achievement is critical to BACT/LAER decision making across the United States, we encourage you to submit information on these precedent setting achievements, even if the source was not subject to formal NSR permit processes.

I have enclosed an RBLC data input form with instructions (Appendix E) for your convenience. Information also can be submitted electronically by using the RBLC Standalone Editor or directly on-line. The Standalone Editor is a program that simulates the Clearinghouse and runs on your personal computer. It generates electronic data files that can be submitted on a floppy disk or by E-Mail. The program can be downloaded from the CATC Internet World Wide Web Page (CATC Web) at < http://www.epa.gov/ttn/catc >. You can also access the new RBLC Web from the CATC Web home page. The RBLC Web is a fully functional web site that provides complete access to RBLC data.

On-line data entry is a little more complicated. It allows a designated person from your agency to enter data directly to the RBLC transient data base. Currently this can be accomplished by accessing the old RBLC electronic bulletin board system (BBS) through a direct telephone modem connection or through a Telnet connection on the Internet. If you are interested in direct on-line data entry, please contact Joe Steigerwald at (919) 541-2736. Note that we are considering the possibility of on-line data entry directly on the World Wide Web and would appreciate receiving your agency's opinion regarding the need for this service.

Thank you for your cooperation. For your information, I have enclosed a copy of the new CATC brochure. The CATC has replaced the Control Technology Center (CTC) and includes the RBLC. If you have any questions concerning this matter, please contact me at the above address or call (919) 541-5432.

Sincerely,

Robert J. Blaszczak
CATC (MD-12)

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
RESEARCH TRIANGLE PARK, NC 27711

MAR 05 1999

OFFICE OF
AIR QUALITY PLANNING
AND STANDARDS

STATE, LOCAL AND REGIONAL OFFICE
NEW SOURCE REVIEW - RACT/BACT/LAER CLEARINGHOUSE
PROGRAM CONTACTS

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Instructions for completing the "RACT/BACT/LAER DETERMINATION INPUT FORM" sheet are enclosed. The instructions include a copy of the input form. Please use the enclosed version of the form and discard previous outdated versions. Please refer to the current edition of the RBLC User's Manual for additional information as required. If you still need help completing the form or have any questions concerning the RBLC, contact me at (919) 541-2736. Copies of the data submittal forms and instructions are also available on the RBLC World Wide Web (WWW) site.

As an alternative to submitting forms, your agency can submit additions in two electronic formats. First, data may be entered directly into the RBLC data base while on-line with the RBLC Bulletin Board System (BBS) on the Technology Transfer Network (TTN) if your agency has a user authorized to enter information directly into the RBLC data base. Second, you may use the standalone version of RBLC on your PC and submit your determinations on a diskette. (See the enclosures for more information on this alternative.) The RBLC is currently working

Enclosure 3

OBSOLETE

INSTRUCTIONS FOR COMPLETING RACT/BACT/LAER CLEARINGHOUSE

INPUT FORM

1. Company Name/Site Location: Insert name and address of the proposed facility. The address should be the location of the proposed facility, not the address of the parent company, unless they are the same.

2. Determination Made by: Designate the permitting agency and the person to whom telephone requests should be directed. This should be the person most capable of responding to factual questions about the permit decision. Please include the area code with the phone number.

3. Permit/File Number: This should be the identification number assigned by the agency that issued the permit.

4. ID Numbers and Codes: Fill-in the requested AIRS identification number, if available, and the SIC code.

5. Scheduling Information: Permitting scheduling dates stored include:

   - receipt of application (estimated or actual)
   - final permit issued (estimated or actual)
   - start-up operation (estimated or actual)
   - compliance verification (estimated or actual

   Please enter all of the scheduling information available.

6 Facility Notes: This section is for the completion or elaboration of any of the above items where space was a problem. Also, any information that you feel other agencies should know about this determination should appear here. Notes are typically used for the following:

   * More than one permit number
   * More detail on a particular process
   * More than one contact person
   * Further explanation regarding the designation of a source as new or modified
   * Further explanation of the emission limit or the support documentation associated with setting the limit (i.e., limit based on design or stack test)

7. Process Description: List all processes subject to this permit by name (e.g., kiln, boiler) for which a throughput limit, operating limit, emission limit, control strategy, performance or equipment standard has been specified. Use additional pages as necessary. Additional information on a process may be placed in the Process Notes section.

   Process name or process equipment should be listed using one of the process categories listed in Appendix C (Detailed Listing of Proposed Process Categories). A descriptor may be added behind the generic category name. For example,

   Boiler, coal-fired, 3 each
   Kiln, 3 each
   Conveyors, coal/limestone
   Furnace, arc
   Boiler, recovery
   Boiler, power
   Engines, gas-fired

8. Process Type Code: A code assigned to each process (see Appendix B) used to categorize determinations.

9. SCC Code: This code is the standard source classification for processes used throughout the Office of Air at EPA.

10. Throughput Capacity: Indicate the maximum design capacity of the unit. Use the same units of measure used in the NSPS to describe the size of a source. Wherever possible, use the list of standardized abbreviations for process and emission limit - Appendix D.

11 Compliance Verification: This series of fields allows you to enter a yes or no response to the following questions:

   - Compliance verified?
   - Method of confirmation:
     - Stack testing?
     - Other testing?
     - Inspection?
     - Calculations?

   You may also enter a narrative description of other types of confirmation methods.

12. Process Notes: This field should contain any additional information on the process being permitted.

13. Pollutant(s) Emitted: Make an entry for each pollutant or parameter for which a control requirement or other restraint

has been specified (PM, SO_2 CO_2, NO_2, opacity, or others). Use a separate block for each entry, and identify the pollutant and provide its Chemical Abstracts (CAS) number. Use the following standard abbreviations for these common pollutants whenever possible:

PM	Particulate Matter
SO_2	Sulfur Dioxide
NO_2	Nitrogen Oxides
CO	Carbon Monoxide
VOC	Volatile Organic Compounds
VE	Visible Emissions
TRS	Total Reduced Sulfur
F	Fluoride
Be	Beryllium
H_2S	Hydrogen Sulfide
Hg	Mercury
VC	Vinyl Chloride

Abbreviations for other pollutants are listed in Appendix D, along with CAS numbers.

14. Emission Limit(s): For consistency and ease of comparison, list the emission limit or rate in the units of measure listed in Appendix C or those used in AP-42. Wherever possible use the list of standard abbreviations (Appendix D).

There are multiple emission limits in the Clearinghouse, they are:

Primary emission limit and units: The primary emission limit listed in the permit.

Alternate emission limit and units: If provided on the permit, these numbers represent any alternate emission measurements which the facility may make.

Standardized limit and units: This limit allows comparison with other similar determinations in the RBLC. Standard units are provided for certain process types (see Appendix D) so that users can compare the entries in this field to determine the most stringent limits.

The base-line limit is no longer used in the RBLC data base

15. Emission Type: A one-character field indicating whether the emission is fugitive, point-source, or area-source.

16 Pollution Reduction Ranking Information: Two pieces of information are requested: The number of options examined and the rank of the option selected. The "rank" is the number of the option selected when the options are ordered according to the performance of the system. Number 1 would be the best controlled system, number 2 would be the next best, etc.

Regulatory Requirements Associated with Limit (Basis of Limit): Indicate the regulatory requirement that precipitated establishing the limit presented, i.e., BACT-PSD, BACT-Other, LAER, MACT, RACT, GACT, NSPS, NESHAP, or Other. Do not list such items as stack test, design or others. These items generally represent the supporting information that may have been used to document or establish the given limit. Such items should be included in the Notes section.

To facilitate the identification of limits use the following abbreviations:

- BACT-PSD (Prevention of Significant Deterioration)
- BACT-Other (regulated by State/local rules, not PSD)
- LAER (Lowest Available Control Technology)
- MACT (Maximum Achievable Control Technology)
- RACT (Reasonably Available Control Technology)
- GACT (Generally Available Control Technology)
- NSPS (New Source Performance Standards)
- NESHAP (National Emission Standards for Hazardous Air Pollutants)
- Other

18 Pollution Reduction Method Description: Describe the specific pollution prevention techniques and add-on equipment used to achieve the permitted emission limits. Specify "NONE" if no controls are feasible. Pollution prevention techniques include operational modifications, limits in the type and amount of raw materials used, limits on throughput or hours of operation, maintenance requirements, equipment specifications, or other limitations. Typical add-on equipment includes ESP, fabric filter, etc. Information in this section may be supplemented under the "Notes" section.

Please note that the RBLC no longer has separate fields for equipment manufacturer and model number. Place this information, if you have it, in the notes.

Overall Efficiency %: Enter the overall system pollution reduction efficiency, consisting of capture (hoods, ductwork, etc.) and collection (control device) efficiency.

Any breakdown of efficiencies for capture or collection individually should be shown under "Notes." For P2, indicate the overall effectiveness of the P2 methods.

20. Cost Data: Pollution Reduction costs include

- Capital cost of control equipment
- Annual operation and maintenance cost for all control methods
- Annualized cost (amortized capital cost + annual operation & maintenance costs)
- Cost effectiveness in dollars per ton (annualized cost/tons of pollutant removed)
- Year of the dollar used in cost calculations
- Cost verified by the permitting agency (yes or no)

When you have completed the form, mail it to the following address:

RACT/BACT/LAER CLEARINGHOUSE
RBLC (MD-12)
US EPA
RTP, NC 27711

ENCLOSURE

to: RACT/BACT/LAER CLEARINGHOUSE
RBLC (MD-12)
US EPA
RTP, NC 27711

Date Submitted

RACT/BACT/LAER CLEARINGHOUSE INPUT FORM

Facility Information

Company Name: _____

Facility Address: _____

City: _____ County: _____ State: _____ Zip Code: _____

Permitting Agency: _____

Agency Contact: _____

Telephone Number: _____

Permit Number: _____

AIRS Facility Number: _____

EPA ID Number: _____

SIC Code: _____

Public Hearing Held? Y N

The Source is: New Modified (circle one)

Scheduling Information:	Date	(circle one)
Received Application:	/ /	Estimated/Actual
Final Permit Issued:	/ /	Estimated/Actual
Start Up Operation:	/ /	Estimated/Actual
Compliance Verification:	/ /	Estimated/Actual

Facility Notes: _____

Facility Notes (continued): _____

☐ Notes Continued on a Separate Page?

Process Information

Process Description: _____

RBLC Process Code: _____

SCC Code: _____

Throughput Capacity/Size: _____

Compliance Verified? Y N

By What Method? (circle those that apply):

Stack Test? Y N Calculation? Y N

Other Test? Y N Other Method? _____

Inspection? Y N

Process Notes : _____

Pollutant Information

Source Name: _____ Permit Number: _____

Process Description: _____ RBLC Process Code: _____

Pollutant Name: _____

CAS Number: _____

Emission Limit: Primary: _____

Alternative: _____

RBLC Std.: _____

Emission Type? (circle one): area point fugitive

No. of Pollution Reduction Options Examined: _____

Rank of Pollution Reduction Option Selected: _____

Basis of Limit (circle one): BACT-PSD BACT-Other LAER MACT GACT RACT NSPS NESHAPS OTHER

Pollution Reduction Method Description:

- ☐ Pollution Prevention (P2)
- ☐ Add-on Control Device
- ☐ Both P2 and Add-on
- ☐ No Controls Feasible

Pollution Prevention/Add-on Control Equipment Description: _____

Overall % Efficiency: _____

Cost Info: Capital Costs: _____

O & M Costs: _____

Annualized Costs: _____

Cost Effectiveness: _____

Costs are in _____ dollars. (year) Costs verified by Agency? Y N

Pollutant Name: _____

CAS Number: _____

Emission Limit: Primary: _____

Alternative: _____

RBLC Std.: _____

Emission Type? (circle one): area point fugitive

No. of Pollution Reduction Options Examined: _____

Rank of Pollution Reduction Option Selected: _____

Basis of Limit (circle one): BACT-PSD BACT-Other LAER MACT GACT RACT NSPS NESHAPS OTHER

Pollution Reduction Method Description:

- ☐ Pollution Prevention (P2)
- ☐ Add-on Control Device
- ☐ Both P2 and Add-on
- ☐ No Controls Feasible

Pollution Prevention/Add-on Control Equipment Description: _____

Overall % Efficiency: _____

Cost Info: Capital Costs: _____

O & M Costs: _____

Annualized Costs: _____

Cost Effectiveness: _____

Costs are in _____ dollars. (year) Costs verified by Agency? Y N

ENCLOSURE 5

USER'S MANUAL FOR THE RBLC DATA BASE

Part 5 -- Editing Information Online in the RBLC Data Base

Upon entering the RBLC information system you may choose to Browse, Query, or Edit. The first screen that you see is shown in Figure 5.1. This section of the RBLC User's Manual describes the Edit option. To choose Edit from the Main menu, simply press <E>. As with the Query section of the system, you must press the Enter key after each menu selection.

```
                    RACT/BACT/LAER INFORMATION SYSTEM
RBLC                          DATA BASE MENU                DATE: 04/01/1998

                    <B>   BROWSE DATA BASE

                    <Q>   QUERY DATA BASE

                    <E>   EDIT DATA BASE

                    <X>   EXIT TO RBLC BBS

          Press <F1> for HELP anywhere throughout the system.
 Enter |        Press the appropriate letter to select option
 Option |                or press <F1> for HELP.
```

Figure 5.1 - RBLC Main Menu

It is important to note that the RBLC data base has an enhanced HELP system to provide assistance at any point during an edit session. When you press F1 to access HELP, the HELP system explains the screen you are currently viewing. HELP is context-sensitive, so that you do not have to scroll through long lists of values in order to find the one appropriate to your situation.

After you select Edit from the Main menu, the system asks you for a password (see Figure 5.2). In order to add or edit any information in the RBLC data base, you must have a valid TTN user ID and RBLC password. For information on obtaining a user ID see Part 1 of this User's Manual.

```
                    RACT/BACT/LAER INFORMATION SYSTEM
RBLC                          DATA BASE MENU                DATE: 04/01/1998

                    <B>   BROWSE DATA BASE

                    <Q>   QUERY DATA BASE

                    <E>   EDIT DATA BASE

                    <X>   EXIT TO RBLC BBS
                          Enter Password:

          Press <F1> for HELP anywhere throughout the system.
 Enter  |     Password Required to Continue to the Edit Menu!!
 Option |          Type in the Password and Press <Enter>
   E    |                or Press <Esc> to abandon
```

Figure 5.2 - Password Entry Box

Following the prompt to enter a password, you should enter your authorized password. Based on this password, you have access to specific determinations in both the transient and permanent RBLC data bases. If you enter an invalid password, the system displays a warning message and denies you entry into the Edit module (see Figure 5.3).

```
                    RACT/BACT/LAER INFORMATION SYSTEM
RBLC                          DATA BASE MENU                DATE: 04/01/1998

                    <B>   BROWSE DATA BASE

                    <Q>   QUERY DATA BASE

                    <E>   EDIT DATA BASE

                    <X>   EXIT TO RBLC BBS
                          Enter Password: XXXXXXX

          Press <F1> for HELP anywhere throughout the system.
 Enter  |
 Option |     *** INVALID PASSWORD !! ACCESS DENIED !! ***
   E    |
```

Figure 5.3 - Invalid Password Entered Into RBLC

After you have entered a valid password, the system displays the Record Selection Menu (see Figure 5.4). This menu allows you to select which records to update. The <L> option takes you to the facility list screen that displays the RBLC IDs and company names you are authorized to update.

```
RBLC  EDIT                RECORD SELECTION MENU                DATE: 04/01/1998

                          <E>   ENTER RBLC ID

                          <L>   LIST RBLC IDs

                          <A>   ADD NEW DETERMINATION

                          <X>   EXIT TO RBLC BBS

 Enter      Press the appropriate letter to select option
 Option                or press <F1> for HELP.
```

Figure 5.4 - Record Selection Menu

Throughout this section of the User's Manual we will refer to determinations in three ways: new, edited, and old. *New* indicates a determination that does not exist in the master data base. It has been recently entered into the RBLC information system and has not been promoted. *Edited* indicates a determination that exists in the master data base, has recently been edited, and the current copy resides in the transient data base. *Old* indicates a determination that exists *only* in the master data base. No edits exist for this record in the transient data base.

At the Record Selection Menu you have several options. As mentioned earlier, the <L> option stake you directly to a facility listing (similar to the list seen in the List Facilities View Screen). From this listing you may choose to edit one of the facilities on the list.

Another option is <E> Enter RBLC ID. If you choose this option, the system displays a pop-up box and prompts you to enter the RBLC ID of the record which you would like to update (Figure 5.5). If you do not have authority to update the records for the RBLC ID entered, the system displays a warning message, and you are denied access (Figure 5.6). Alternately, if you enter a RBLC ID that does not exist, the system displays an error message (Figure 5.7).

```
RBLC  EDIT                RECORD SELECTION MENU                DATE: 04/01/1998

                      <E>   ENTER RBLC ID

                      <L>   LIST RBLC IDs

                      <A>   ADD NEW DETERMINATION

                      <X>   EXIT TO SELECT DATA BASE MENU

                                  Enter RBLC ID:    -    .

 Enter        Enter the RBLC ID of the Record you want to EDIT.
 Option
   E     <Esc> to Abandon                                  <F1> for HELP
```

Figure 5.5 - Enter RBLC ID

```
RBLC  EDIT                RECORD SELECTION MENU                DATE: 04/01/1998

                      <E>   ENTER RBLC ID

                      <L>   LIST RBLC IDs

                      <A>   ADD NEW DETERMINATION

                      <X>   EXIT TO SELECT DATA BASE MENU

                                  Enter RBLC ID:  WY-0011

 Enter
 Option
   E        *** YOU DO NOT HAVE AUTHORITY TO EDIT THIS RECORD !! ***
```

Figure 5.6 - Edit Access Denied

```
RBLC  EDIT                RECORD SELECTION MENU                DATE: 04/01/1998

                    <E>   ENTER RBLC ID

                    <L>   LIST RBLC IDs

                    <A>   ADD NEW DETERMINATION

                    <X>   EXIT TO SELECT DATA BASE MENU

                                 Enter RBLC ID:  KK-2222.20

 Enter
 Option
   E                     *** INVALID RBLC ID ***
```

Figure 5.7 - Invalid RBLC ID

Choose <A> Add New Determination to input new information. The system assigns a unique RBLC ID to the determination based on your agency affiliation and displays a data entry screen. If you are associated with an EPA regional office or other agency that may have authority for multiple jurisdictions, the system prompts you for the state abbreviation of the state in which the facility is located (Figure 5.8). Using this information, the system assigns a RBLC ID to the determination and displays a screen onto which you can enter information. For information on adding a new determination, see Adding New Determinations to the Data Base later in this section.

```
RBLC  EDIT                RECORD SELECTION MENU                DATE: 04/01/1998

                          <E>   ENTER RBLC ID

                          <L>   LIST RBLC IDs

                          <A>   ADD NEW DETERMINATION

                          <X>   EXIT TO SELECT DATA BASE MENU

                                     Enter State Abbreviation:

 Enter   Enter the State Abbreviation in which your Facility is found
 Option
   A     <Esc> to Abandon                                  <F1> for HELP
```

Figure 5.8 - Add New Facility Selected

Editing the Data Base

Editing the data base allows you to track the progress of your determinations, enter new information, or correct any mistakes you may find in your determinations.

After you choose <L> List RBLC IDs at the Record Selection Menu, the system presents you with a list of the facilities which you are authorized to edit (Figure 5.9). The list identifies the records you are authorized to update, and then displays the RBLC ID and facility name for each record, in order by facility name. Any new or edited determinations listed here have a letter displayed to the left of the RBLC ID that describes the status of the record. If no letter is displayed, then the determination is old.

```
RBLC  EDIT                          FACILITY LIST                DATE: 04/01/1998

Record
Number     RBLC ID.SFX

1          WA-0419        ARCO OIL AND GAS CO., RIO VIEJO SITE
2          WA-0413        BEAVER FALLS
3          WA-0022        JAMES RIVER CORP.
4          WA-0205        KALAMAZOO POWER LIMITED
5          WA-0206        KAY AUTOMOTIVE GRAPHICS
6          WA-0023        RINGLING BROTHERS, BARNUM AND BAILEY CIRCUS INC
7          WA-0208        SEMMERLING FENCE
8          WA-0418        SOUTHERN GAS
9          WA-0207        TUSCARORA PLASTICS, INC.
10         WA-0095        UPF CORPORATION
           "C" = complete          "I" = Incomplete          "D" = Deleted
           New Determinations are listed first.

  Enter    Enter Record Number to Select a Facility                <F1> HELP
 Option                                                  <Ctrl><R> to Page Up
   1       E<X>it to EDIT Menu                          <Ctrl><C> to Page Down
```

Figure 5.9 - Facility List

From the list presented, you may choose the facility to edit. In this case, let's say you decide to edit WA-0022. You enter the appropriate record number, in this case (3), and the system displays the process list for that particular facility. Figure 5.10 shows this process list. Selecting <E> Enter RBLC ID at the Record Selection Menu brings you directly to the process list.

```
RBLC  EDIT                          PROCESS LIST                 DATE: 04/01/1998

Facility:  WA-0022     JAMES RIVER CORP.

REC NO   Process Name                                Throughput Capacity

1        FURNACE, RECOVERY, #3                       523.00 MMBTU/H
2        FURNACE, RECOVERY, #4                       770.00 MMBTU/H
3        DISSOLVER VENT, SMELT, #3                   0.00
4        DISSOLVER VENT, SMELT, #4                   0.00
5        KILN, LIME & EVAPORATOR, BLOW HEAT          0.00
6        BOILER, MAGNEFITE                           400.00 MMBTU/H
7        BOILER, POWER, #3                           345.00 MMBTU/H

         "C" = Complete          "I" = Incomplete          "D" = Deleted

  Enter  Enter Record Number to Select a Process.                <F1> HELP
 Option  <F>acility Level Data                          <Ctrl><R> to Page Up
   1     E<X>it to Facility List                      <Ctrl><C> to Page Down
```

At the process list, you must know whether you are editing facility level information, process level information, or pollutant level information. To determine which level your data is, see Part 2 of this User's Manual. A very common area of editing is scheduling information, which is used for tracking the progress of a determination and permit; this information is stored at the facility level.

Although it is possible to edit almost all of the information for a determination, it is important to note two areas in which editing is restricted. First, it is possible to edit process information for a determination, but it is not possible to *add* a process to or to delete a process or pollutant from an existing determination. For tracking purposes, it is necessary for any new processes to be added as part of a *new* determination. In this case, you must choose <A> Add New Facility at the Record Selection Menu and reenter the facility information and the information for the new process.

Agency Codes and Agency Names are the second area in which the edit function is restricted. You cannot change these fields once they have been entered into the data base. If a determination has an error or if an agency name is changed due to reorganization, please contact the RBLC System Administrator at (919) 541-2736. He or she has the authority to make this change for you.

The last area where editing is restricted is the RBLC ID (and suffix where applicable). Because this information is system-generated, it is never entered or edited by you.

If you choose <F> Facility Level Data at the Process List, the system displays the facility level information as seen in Figure 5.11. You can choose to edit or delete the data or view the notes.

The 'complete' or 'incomplete' indicator displayed in the upper right corner of the screen (see Figure 5.12) tells the RBLC System Administrator (SA) whether the determination is complete and ready to be moved to the RBLC permanent data base. All new determinations are initially marked 'incomplete' until the quality assurance (QA) review is conducted. This indicator is toggled to 'complete' if the determination passes the QA review. You cannot change this indicator. Periodically, the RBLC SA will review the determinations in the transient data base which have been marked 'complete'. If all of the required fields are complete, the RBLC SA will promote the determination to the permanent RBLC data base. Alternatively, if the RBLC SA decides that the determination is not complete, he or she will toggle it back to incomplete and send a notice to the person authorized to edit the determination. For information about the required fields, see <u>Adding New Determinations to the Data Base</u> later in this section.

```
RBLC  EDIT                    FACILITY  DATA                DATE: 04/01/1998

WA-0022    JAMES RIVER CORP.
ADDR: 1000 COMPUTER CIRCLE                CITY: CAMAS
COUNTY: WAKE                                ST: WA  ZIP: 27621          REG: 10

                                                          ENTERED: 04/24/1989
AGENCY: WA999-WASHINGTON DEPARTMENT OF THE ENVIRONMENT UPDATED: 01/31/1992
CONTACT:  ALAN BUTLER                                       Est/Act Date
  PHONE:  (206)649-7103                              APPL RCPT: ACT 04/04/1985
PERMIT/FILE #: PSD-88-3 & DE-88-360 MODIFICAT PERMIT ISSUE: ACT 09/26/1991
   SIC:                                                START-UP: ACT 07/01/1990
AIRS ID:                                           COMPL VERIFY: ACT 03/01/1990
FACILITY NOTES:

  Enter   <E>dit Facility     <D>elete Facility                  <F1> HELP
 Option   Exit to <F>acility List                     <Ctrl><R> to Page Up
          E<X>it to Process List    View <N>otes    <Ctrl><C> to Page Down
```

Figure 5.11 - Facility Data Screen

```
RBLC  EDIT                    FACILITY  DATA                DATE: 04/01/1998

WA-0022    JAMES RIVER CORP.                                        COMPLETE
ADDR: 1000 COMPUTER CIRCLE                CITY: CAMAS
COUNTY: WAKE                                ST: WA  ZIP: 27621          REG: 10

                                                          ENTERED: 04/24/1989
AGENCY: WA999-WASHINGTON DEPARTMENT OF THE ENVIRONMENT UPDATED: 01/31/1992
CONTACT:  ALAN BUTLER                                       Est/Act Date
  PHONE:  (206)649-7103                              APPL RCPT: ACT 04/04/1985
PERMIT/FILE #: PSD-88-3 & DE-88-360 MODIFICAT PERMIT ISSUE: ACT 09/26/1991
   SIC:                                                START-UP: ACT 07/01/1990
AIRS ID:                                           COMPL VERIFY: ACT 03/01/1990
FACILITY NOTES:

  Enter   <E>dit Facility     <D>elete Facility                  <F1> HELP
 Option   Exit to <F>acility List                     <Ctrl><R> to Page Up
          E<X>it to Process List    Edit <N>otes    <Ctrl><C> to Page Down
```

Figure 5.12 - Record Flagged as Complete

If you choose to <E> Edit Facility at the Facility Data screen, the system displays all facility level information for the determination. All fields that may be edited are highlighted on screen. See

Figure 5.13. You must press the Enter key to move the cursor to the field(s) that you would like to edit and type in the new information. If you have questions regarding valid information for a field, press F1 for HELP. The RBLC HELP system is context-sensitive and provides information for this particular field. To edit the notes, choose <N> Edit Notes at the Facility Data screen.

```
RBLC  EDIT                    EDIT FACILITY DATA            DATE: 04/01/1998
WA-0022     JAMES RIVER CORP.                                       COMPLETE
ADDR: 1000 COMPUTER CIRCLE              CITY: CAMAS
COUNTY: WAKE                              ST: WA  ZIP: 27621          REG: 10

                                                          ENTERED: 04/24/1989
AGENCY: WA999-WASHINGTON DEPARTMENT OF THE ENVIRONMENT UPDATED: 01/31/1992
CONTACT:  ALAN BUTLER                                     Est/Act Date
  PHONE:  (206)649-7103                             APPL RCPT: ACT 04/04/1985
PERMIT/FILE #: PSD-88-3 & DE-88-360 MODIFICAT PERMIT ISSUE: ACT 09/26/1991
   SIC:                                              START-UP: ACT 07/01/1990
AIRS ID:                                          COMPL VERIFY: ACT 03/01/1990
FACILITY NOTES:

                      <Ctrl><W> to Save Facility Data

     <Esc> to Abandon and Exit                                  <F1> HELP
```

Figure 5.13 - Edit Option Selected from Facility Data Screen (Figure 5.11)

After you input all the facility information, the system validates the information in key fields. You must enter a non-blank facility name and specify "New/Mod" for the determination. The data can be saved if the information in each field is in the proper format, i.e. dates before the present date in certain date fields, specific numeric ranges in numeric fields.

Another option which you may choose at the Facility Data screen (Figure 5.11) is to <D> Delete Facility. This option allows the facility data and any processes and pollutants associated with the facility to be deleted from the transient data base (see Figure 5.14).

```
RBLC  EDIT                          FACILITY DATA                DATE: 04/01/1998

WA-0022    JAMES RIVER CORP.                                          COMPLETE
ADDR: 1000 COMPUTER CIRCLE                CITY: CAMAS
COUNTY: WAKE                                ST: WA  ZIP: 27621          REG: 10

                                                              ENTERED: 04/24/1989
AGENCY: WA999-WASHINGTON DEPARTMENT OF THE ENVIRONMENT       UPDATED: 01/31/1992
CONTACT:  ALAN BUTLER                                          Est/Act Date
  PHONE:  (206)649-7103                                   APPL RCVD: ACT 04/04/1985
PERMIT/FILE #: PSD-88-3 & DE-88-360 MODIFICAT            PERMIT ISSUE: ACT 09/26/1991
   SIC:                                                       START-UP: ACT 07/01/1990
AIRS ID:                                                  COMPL VERIFY: ACT 03/01/1990
FACILITY NOTES:

  Enter          ARE YOU SURE YOU WANT TO FLAG THIS DETERMINATION AS
 Option                 DELETED FROM THE TRANSIENT DATA SET ?
   D                                   N
```

Figure 5.14 - Delete Option Selected from Facility Data Screen

Selecting to delete a determination from the transient data base actually *flags* all the records for that determination as deleted. You can still see the determination but cannot edit it. The word "DELETED" appears in the upper right corner of the screen. For edited determinations, you can choose to copy the original data from the master data base to the transient data base instead of flagging the determination as deleted. Any deleted records are permanently removed from the transient data base when records are promoted to the master data base. If you have chosen to delete a determination in error, you may *un*delete. This simply removes the flags from each record and the records can be edited as before. Note that only new or edited determinations may be deleted/undeleted.

Using the current example of the James River Corporation, you have now viewed the facility list, chosen the first facility, and edited the facility level information. Now it is time to edit the process level information. After saving the changes to the facility level information, choose <X> to return to the Process List. You may now E<X>it to Facility List or enter a record number to select a process. See Figure 5.10 to review the process list. Assume that you want to edit information for the first process, Furnace, Recovery, #3. Press the Enter key to select process number one. The system displays the Pollutant List for the process (see Figure 5.15). At this screen, you may choose to edit the process data or view the information for a specific pollutant, or add a new pollutant to this process. Figure 5.16 displays the screen which you would see after choosing <P> Process Data. At this screen, you may choose to return to a previous screen, <E> Edit Process information, or <D> Delete Process information.

```
RBLC  EDIT                    EDIT PROCESS DATA                    DATE: 04/01/1998
WA-0022    JAMES RIVER CORP.

PROCESS: FURNACE, RECOVERY, #3

PROCESS TYPE:  1.999                      HAS COMPLIANCE BEEN VERIFIED?    Y
SCC CODE:                                 IF YES, HOW?   STACK TESTING?    N
PRIMARY FUEL:                                              INSPECTIONS?    N
THROUGHPUT:    523.00  MMBTU/H                            CALCULATIONS?    Y
                                                         OTHER TESTING?    Y
                                          DESCRIPTION:

PROCESS/COMPLIANCE NOTES:

                        <Ctrl><W> to Save Process Data

     <Esc> to Abandon and Exit                                  <F1> HELP
```

Figure 5.17 - Edit Process Screen, fields to be edited will be highlighted

Deleting a process from a new determination flags the process record and all the associated pollutant records, just the same as deleting from the facility level. For edited determinations, the original process and pollutant data from the master data base is copied to the transient data base. Undeleting a process works exactly the same at the process level as it does at the facility level.

Remember, only new or edited determinations may be deleted/undeleted.

To edit pollutant information, follow the same steps as you did to edit facility and process level information. First, you must choose a pollutant from the Pollutant List. Then the system displays the Pollutant Data screen (see Figure 5.18). At this point, you may choose to <D> Delete Pollutant or <E> Edit Pollutant information. If you choose to edit the information, the Edit Pollutant screen appears with the appropriate fields highlighted (see Figure 5.19). As with facility and process level information, you can access HELP at any point while editing pollutant data by pressing F1.

```
RBLC  EDIT                          POLLUTANT LIST                DATE  04/01/1998

Facility: WA-0022.AA JAMES RIVER CORP.
Process:  FURNACE, RECOVERY, #3                        523.00 MMBTU/H

REC NO   Pollutant          Primary Emission Limit                Basis
1        PM10               0.0330 GR/DSCF AT 8% O2               BACT
2        VE                 20.0000 % OPACITY                     BACT
3        SO2                10.0000 PPM AT 8% O2                  BACT
4        NOX                2.1300 LB/ADUT                        BACT
5        CO                 2755.0000 T/YR                        BACT
6        VOC                219.0000 T/YR                         LAER
7        TRS                5.0000 PPMDV AT 8% O2, 12H            BACT

  Enter   Enter Record Number to Select Pollutant Data.            <F1> HELP
 Option   Exit to <E>DIT Menu        <A>dd Pollutant   <Ctrl><R> to Page Up
   1      E<X>it to Process List   <P>rocess Data   <Ctrl><C> to Page Down
```

Figure 5.15 - Pollutant List

```
RBLC  EDIT                          PROCESS DATA                  DATE: 04/01/1998

WA-0022    JAMES RIVER CORP.

PROCESS: FURNACE, RECOVERY, #3

PROCESS TYPE: 11.999                    HAS COMPLIANCE BEEN VERIFIED?    Y
SCC CODE:                               IF YES, HOW?   STACK TESTING?    N
PRIMARY FUEL:                                            INSPECTIONS?    N
THROUGHPUT:  523.00 MMBTU/H                             CALCULATIONS?    Y
                                                       OTHER TESTING?    Y
                                        DESCRIPTION:

PROCESS/COMPLIANCE NOTES:

  Enter   Exit to EDIT <M>enu            <D>elete Process        <F1> HELP
 Option   Exit to <P>rocess List    <E>dit Process    <Ctrl><R> to Page Up
          E<X>it to Pollutant List                  <Ctrl><C> to Page Down
```

Figure 5.16 - Process Data Screen, user may now choose to edit information

Figure 5.17 displays the screen used to edit process information (RBLC highlights all fields that may be edited). As with the facility information, you may press F1 to access HELP at any point while editing process information.

```
RBLC  EDIT                    POLLUTANT DATA                DATE: 04/01/1998

WA-0022     JAMES RIVER CORP.
PROCESS:    FURNACE, RECOVERY, #3                   523.00 MMBTU/H
POLLUTANT: PM10                    CAS NUMBER:
POLLUTION PREVENTION/ADD-ON CONTROL EQUIP/BOTH/NO CONTROLS FEASIBLE:  A
POLL. PREVENT./ADD-ON    ESP W/HEAT RECOVERY SCRUBBER
          DESCRIPTION:

NUMBER OF CONTROL OPTIONS CONSIDERED:  0  RANK OF OPTION SELECTED:  0
EMISSION LIMITS:
      PRIMARY:          0.0330 GR/DSCF AT 8% O2          BASIS:  BACT
    ALTERNATE:        328.0000 T/YR                   % EFFICIENCY:   99.500
 STANDARDIZED:          0.0000                        EMISSION TYPE:  P

COST DATA:          VERIFIED BY AGENCY: N  YEAR USED IN COST ESTIMATES:
    CAP COST OF CONTROL EQUIP: $       0.00    ANNUALIZED COST: $       0.00
    O/M COST OF CONTROL EQUIP: $       0.00 COST EFFECTVNS. $/TON       0.00

  Enter   Exit to EDIT <M>enu                              <D>elete Pollutant
 Option   Exit to <P>rocess List   <E>dit Pollutant   <Ctrl><R> to Page Up
          E<X>it to Pollutant List     <F1> HELP    <Ctrl><C> to Page Down
```

Figure 5.18 - Pollutant Data Screen

```
RBLC  EDIT                  EDIT POLLUTANT DATA             DATE: 04/01/1998

WA-0022     JAMES RIVER CORP.
PROCESS:    FURNACE, RECOVERY, #3                   523.00 MMBTU/H
POLLUTANT: PM10                    CAS NUMBER:
POLLUTION PREVENTION/ADD-ON CONTROL EQUIP/BOTH/NO CONTROLS FEASIBLE:  A
POLL. PREVENT./ADD-ON    ESP W/HEAT RECOVERY SCRUBBER
          DESCRIPTION:

NUMBER OF CONTROL OPTIONS CONSIDERED:  0  RANK OF OPTION SELECTED:  0
EMISSION LIMITS:
      PRIMARY:          0.0330 GR/DSCF AT 8% O2          BASIS:  BACT
    ALTERNATE:        328.0000 T/YR                   % EFFICIENCY:   99.500
 STANDARDIZED:          0.0000                        EMISSION TYPE:  P

COST DATA:          VERIFIED BY AGENCY: N  YEAR USED IN COST ESTIMATES:
    CAP COST OF CONTROL EQUIP: $       0.00    ANNUALIZED COST: $       0.00
    O/M COST OF CONTROL EQUIP: $       0.00 COST EFFECTVNS. $/TON       0.00

                  <Ctrl><W> to Save Pollutant Data

     <Esc> to Abandon and Exit                                  <F1> HELP
```

Figure 5.19 - Edit Pollutant Screen

You may continue to edit processes and pollutants for a facility determination until all edits are complete. Once the edit process is complete for the first determination, exit to the Facility List.

At that point, you may choose to E<X>it to Edit Menu or select another facility for which you have update authorization. If you were editing an individual RBLC ID, the E<X>it option from the process list returns you to the Edit menu.

Adding New Determinations to the Data Base

At the Record Selection Menu (Figure 5.4), you may choose to <A> Add New Determination to the RBLC data base. Using this information, the system will assign a unique RBLC ID to the new determination.

The information for the determination does not have to be complete in order to add a determination to the RBLC data base. You can use the system as a tracking tool while a determination or permit is being developed. The scheduling data, stored at the facility level in the RBLC data base, is designed specifically as a tracking aid for air pollution control personnel.

Although the information for a determination does not have to be complete, the RBLC does have certain restrictions with regard to minimum information. For each RBLC determination, you must input at least one process and one pollutant. Only six fields are needed to save the new determination: facility name, NEW/MOD status, process name, process type code, pollutant name, and control method code.

The RBLC also has certain restrictions with regard to information required for a determination to be considered as complete and eligible for promotion to the permanent RBLC data base. Data for most of the searchable fields must be entered before a determination will be promoted. These restrictions help insure that searches will be productive and that the data base contains information that is helpful to most users. Complete determinations must have data for the following RBLC required fields:

Facility name
SIC code
Permit number
Permit issued date
Process name
Process type code
SCC code
Pollutant name
CAS number
Control method code
Control method description
Basis for limit
Overall percent efficiency
Emission type

On-line help is available for Standard Industrial Classification (SIC) codes. SIC and Source Classification Codes (SCC) are available for downloading from the RBLC BBS, in either a dBASE III+ file format or as ASCII text. If you do not have access to this or any other source for these codes, for each process, provide a description of the specific process, including fuel, capacity, and product as appropriate. CAS numbers are not required for generic pollutants such as VOC or PM. If no controls are feasible, enter "N" as the control method code. You do not need to provide a description.

Also, you should not input information until you are certain that you have listed all processes for the facility. You cannot add processes to an existing facility determination. If, for example, a facility makes a modification and adds a process, you must reenter all facility information and add the process information to this new RBLC determination.

Once the system has assigned a unique RBLC ID to the facility, you are ready to input the information for the determination. Remember, the system has context-sensitive HELP throughout the Add process. If you do not understand the type of information that the system requires, just press F1 to view an appropriate HELP screen.

After choosing to add a new facility at the Record Selection Menu, the system will prompt you whether a determination exists from which it should copy facility information. Often, several determinations exist for one facility. You can copy the facility information to the new determination. If you answer 'yes' to the prompt to copy information, the system will ask for a RBLC ID. From this ID, it will copy the information into the Add Facility screen.

After receiving an answer, 'yes' or 'no', the system will display the Add Facility screen with or without the copied information (see Figure 5.20). Note the new RBLC ID in the upper left-hand corner. Unless facility information was copied, all fields on this screen are blank except the following:

State abbreviation
U.S. EPA region
Date of determination entry (current date)
Agency Code and Name
Date of last update (current date)

Enter all facility information for the determination and save the information. The system will provide a message stating that you must now enter process data for the facility (Figure 5.21).

```
RBLC  EDIT                    ADD FACILITY DATA                    DATE: 04/01/1998
WA-0022  COMPANY NAME
ADDR:                                          CITY:
COUNTY:                                          ST: WA  ZIP                    REG: 10

                                                                   ENTERED: 04/24/1989
AGENCY: WA999-WASHINGTON DEPARTMENT OF THE ENVIRONMENT UPDATED: 01/31/1992
CONTACT:                                                             Est/Act Date
  PHONE:  (    )    -                                     APPL RCVD:        /  /
PERMIT/FILE #:                                           PERMIT ISSUE:       /  /
   SIC:                                                      START-UP:       /  /
AIRS ID:                                                 COMPL VERIFY:       /  /
FACILITY NOTES:

                        <Ctrl><W> to Save Facility Data

      <Esc> to Abandon and Exit                                    <F1> HELP
```

Figure 5.20 - Add Facility Screen

```
RBLC  EDIT                    ADD FACILITY DATA                    DATE  04/01/1998
WA-0022     JAMES RIVER CORP.
ADDR:                                          CITY:
COUNTY:                                          ST: WA  ZIP:                   REG: 10

                                                                   ENTERED: 06/15/1992
AGENCY: WA999-WASHINGTON DEPARTMENT OF THE ENVIRONMENT UPDATED: 06/15/1992
CONTACT:                                                             Est/Act Date
  PHONE:  (    )    -                                     APPL RCVD:        /  /
PERMIT/FILE #:                                           PERMIT ISSUE:       /  /
   SIC:                                                      START-UP:       /  /
AIRS ID:                                                 COMPL VERIFY:       /  /
FACILITY NOTES:

  Enter                   *** Facility Data Saved ***
 Option          *** You must now enter a process for this facility ***
```

Figure 5.21 - Facility Data Saved, the user must enter process data.

The next screen that you will see is the Add Process screen (Figure 5.22). You can enter the process data for the first process. If you press <Esc>, a message will ask you if you want to start

over with a new process or quit the entire add procedure. If you choose to quit, the system will delete the facility data and return you to the Record Selection Menu screen. Again, F1 will provide HELP at any point while adding process information. After the process data is input and saved, the system will prompt you to enter the pollutant data (see Figure 5.23).

```
RBLC  EDIT                    ADD PROCESS DATA                    DATE: 04/01/1998
WA-0022    JAMES RIVER CORP.

PROCESS:

PROCESS TYPE:                          HAS COMPLIANCE BEEN VERIFIED?    N
SCC CODE:                              IF YES, HOW?   STACK TESTING?    N
PRIMARY FUEL:                                           INSPECTIONS?    N
THROUGHPUT:       0.00                                 CALCULATIONS?    N
                                                       OTHER TESTING?    N
                                       DESCRIPTION:

PROCESS/COMPLIANCE NOTES:

                        <Ctrl><W> to Save Process Data

     <Esc> to Abandon and Exit                                  <F1> HELP
```

Figure 5.22 - Add Process Screen

The final screen that you will see is the Add Pollutant screen (Figure 5.24). You can enter the pollutant data for the first process. If you press <Esc>, a message will ask you if you want to start over with a new pollutant or quit the entire add procedure. If you choose to quit, the system will delete the facility data and process data and return you to the Record Selection Menu screen. Again, F1 will provide HELP at any point while adding pollutant information.

```
RBLC  EDIT                    ADD PROCESS DATA                    DATE  04/01/1998

WA-0022    JAMES RIVER CORP.

PROCESS:

PROCESS TYPE:                                HAS COMPLIANCE BEEN VERIFIED?    N
SCC CODE:                                    IF YES, HOW?   STACK TESTING?    N
PRIMARY FUEL:                                                 INSPECTIONS?    N
THROUGHPUT:        0.00                                      CALCULATIONS?    N
                                                            OTHER TESTING?    N
                                             DESCRIPTION:

PROCESS/COMPLIANCE NOTES:

 Enter                      *** Process Data Saved ***
 Option          *** You must now enter a pollutant for this process ***
```

Figure 5.23 - Process Data Saved, the user must enter the pollutant data.

```
RBLC  EDIT                    ADD POLLUTANT DATA                  DATE  04/01/1998

WA-0022    JAMES RIVER CORP.
PROCESS:   FURNACE, RECOVERY, #3                    523.00 MMBTU/H
POLLUTANT:                                          CAS NUMBER:
POLLUTION PREVENTION/ADD-ON CONTROL EQUIP/BOTH/NO CONTROLS FEASIBLE
POLL. PREVENT./ADD-ON
          DESCRIPTION:

NUMBER OF CONTROL OPTIONS CONSIDERED:  0  RANK OF OPTION SELECTED:  0
EMISSION LIMITS:
      PRIMARY:          0.0000                          BASIS:
    ALTERNATE:          0.0000                     % EFFICIENCY:     0.000
 STANDARDIZED:          0.0000                    EMISSION TYPE:

COST DATA:          VERIFIED BY AGENCY: N  YEAR USED IN COST ESTIMATES:
    CAP COST OF CONTROL EQUIP: $       0.00    ANNUALIZED COST: $       0.00
    O/M COST OF CONTROL EQUIP: $       0.00 COST EFFECTVNS. $/TON       0.00

                    <Ctrl><W> to Save Pollutant Data

      <Esc> to Abandon and Exit                                  <F1> HELP
```

Figure 5.24 - Add Pollutant Screen

Once the pollutant data is input and saved, the system allows you to enter another pollutant or enter another process with its associated pollutants. Be sure to enter all processes for the

determination, because you cannot add a process to an existing determination. You can, however, add pollutants to processes in existing determinations. The system exits to the Record Selection menu when you do not want to add any more processes or pollutants.

At the Record Selection menu, you can enter additional new determinations or edit any existing determinations for your agency. If necessary, you can also edit new or edited determinations and delete them. Your additions and changes remain in the RBLC transient data base until the RBLC System Administrator reviews the data for accuracy and completeness. Use the Query module and select the transient data base if you want to download your new determinations. The free-format download format lets you see all of the data you entered. This report also shows you how your data stands with regard to promotion to the permanent RBLC data base because an asterisk (*) appears next to each required field in the free-format report.

Information may be submitted to the RBLC by filling out an Input form and mailing it to the RBLC SYSOP. If you would prefer to enter information this way, you may download the Input form in PDF format from the CATC Products section of the CATC web site. You may also obtain Input forms by calling the RBLC SYSOP, Joe Steigerwald at (919) 541-2736. Be sure that you are using the most recent version of the input form, because the data fields used in the RBLC data base change. If you are using an out-of-date form, you may be missing required information or trying to provide information that is no longer stored in the data base. The following instructions explain how to complete the Input form and how to submit it.

INSTRUCTIONS FOR COMPLETING RACT/BACT/LAER CLEARINGHOUSE INPUT FORM

1 Company Name/Site Location: Insert name and address of the proposed facility. The address should be the location of the proposed facility not the address of the parent company unless they are the same.

2. Determination Made by: Designate the permitting agency and the person to whom telephone requests should be directed. This should be the person most capable of responding to factual questions about the permit decision. Please include the area code with the phone number.

3. Permit/File Number: This should be the identification number assigned by the agency that issued the permit.

4. ID Numbers and Codes: Fill-in the requested AIRS identification number, if available, and the SIC code.

5. Scheduling Information: Permitting scheduling dates stored include:

- receipt of application (estimated or actual)
- final permit issued (estimated or actual)
- start-up operation (estimated or actual)
- compliance verification (estimated or actual)

Please enter all of the scheduling information available.

6. Permit Parameters: List all processes subject to this permit by name (e.g., kiln, boiler) for which a throughput limit, operating limit, emission limit, control strategy, performance or equipment standard has been specified. Use additional pages as necessary.

Process name or process equipment should be listed using one of the process categories listed in Appendix C (Detailed Listing of Proposed Process Categories). A descriptor may be added behind the generic category name. For example,

Boiler, coal-fired, 3 each
Kiln, 3 each
Conveyors, coal/limestone
Furnace, arc
Boiler, recovery
Boiler, power
Engines, gas-fired

7. Process Type Code: A code assigned to each process (see Appendix B) used to categorize determinations.

8. SCC Code: This code is the standard source classification for processes used throughout the Office of Air at EPA.

9. Throughput Capacity: Indicate the maximum design capacity of the unit. Use the same units of measure used in the NSPS to describe the size of a source. Wherever possible, use the list of standardized abbreviations for process and emission limit - Appendix D.

10. Compliance Verification: This series of fields allows you to enter a yes or no response to the following questions:

- Compliance verified?
- Method of confirmation:
  - Stack testing?
  - Other testing?
  - Inspection?
  - Calculations?

You may also enter a narrative description of other types of confirmation methods.

11. Pollutant(s) Emitted: make an entry for each pollutant or parameter for which a control requirement or other restraint has been specified (PM, SO_2 CO_2, NO_2, opacity, or others). Use a separate block for each entry, and identify the pollutant and provide its Chemical Abstracts (CAS) number. Use the following standard abbreviations for these common pollutants whenever possible:

PM	Particulate Matter
SO_2	Sulfur Dioxide
NO_2	Nitrogen Oxides

CO	Carbon Monoxide
VOC	Volatile Organic Compounds
VE	Visible Emissions
TRS	Total Reduced Sulfur
F	Fluoride
Be	Beryllium
H_2S	Hydrogen Sulfide
Hg	Mercury
VC	Vinyl Chloride

Abbreviations for other pollutants are listed in Appendix D, along with CAS numbers.

12. Emission Limit(s): For consistency and ease of comparison, list the emission limit or rate in the units of measure listed in Appendix C or those used in AP-42. Wherever possible use the list of standard abbreviations (Appendix D).

There are multiple emission limits in the Clearinghouse, they are:

Primary emission limit and units: The primary emission limit listed in the permit.

Alternate emission limit and units: If provided on the permit, these numbers represent any alternate emission measurements which the facility may make.

Standardized limit and units: This limit allows comparison with other similar determinations in the RBLC. Standard units are provided for certain process types (see Appendix D) so that users can compare the entries in this field to determine the most stringent limits.

The base-line limit is no longer used in the RBLC data base.

13. Type of Emission Controlled: A one-character field indicating whether the emission is fugitive, point-source, or area-source.

14. Control Option Ranking Information: Two pieces of information are requested: The number of control options examined and the rank of the control option selected. The "rank" is the number of the control option selected when the options are ordered according to the performance of the control system. Number 1 would be the best control system, number 2 would be the next best, etc.

15. Regulatory Requirements Associated with Limit: Indicate the regulatory requirement that precipitated establishing the limit presented, i.e., BACT-PSD, BACT-Other, LAER, MACT, RACT, GACT, NSPS, NESHAP, or Other. Do not list such items as stack test, design or others. These items generally represent the supporting information that may have been used to document or establish the given limit. Such items should be included in the notes section.

To facilitate the identification of limits use the following abbreviations:

- BACT-PSD (Prevention of Significant Deterioration)
- BACT-Other (regulated by state/local rules, not PSD)
- LAER (lowest Available Control Technology)
- MACT (Maximum Achievable Control Technology)
- RACT (Reasonably Available Control Technology)
- GACT (Generally Available Control Technology)
- NSPS (New source Performance Standards)
- NESHAP (National Emission Standards for Hazardous Air Pollutants)
- Other

16. Control Method Description: Describe the specific pollution prevention techniques and add-on equipment used to achieve the permitted emission limits. Specify "NONE" if no controls are feasible. Pollution prevention techniques include operational modifications, limits in the type and amount of raw materials used, limits on throughout or hours of operation, maintenance requirements, equipment specifications, or other limitations. Typical add-on equipment includes ESP, fabric filter, etc. Information in this section may be supplemented under the "Notes" section.

Please note that the RBLC no longer has separate fields for equipment manufacturer and model number. Place this information, if you have it, in the notes.

17. Overall Efficiency %: Enter the overall system efficiency, consisting of capture (hoods, ductwork, etc.) and collection (control device) efficiency. Any breakdown of efficiencies for capture or collection individually should be shown under "Notes."

18. Cost Data: Control costs include:

- Capital cost of control equipment
- Annual operation and maintenance cost for all control methods
- Annualized cost (amortized capital cost + annual operation & maintenance costs)
- Cost effectiveness in dollars per ton (annualized cost/tons of pollutant removed)
- Year of the dollar used in cost calculations
- Cost verified by the permitting agency (yes or no)

19. <u>Notes</u>: This section is for the completion or elaboration of any of the above items where space was a problem. Also, any information that you feel other agencies should know about this determination should appear here. Notes are typically used for the following:

* More than one permit number
* More detail on a particular process
* More than one contact person
* Further explanation regarding the designation of a source as new or modified
* Further explanation of the emission limit or the support documentation associated with setting the limit (i.e., limit based on design or stack test)

When you have completed the form, mail it to the following address:

RACT/BACT/LAER CLEARINGHOUSE
RBLC (MD-12)
US EPA
RTP, NC 27711

ENCLOSURE 6

USER'S MANUAL FOR THE RBLC DATA BASE

Part 6 -- Using the Standalone Editor

The on-line Edit option described in the previous section allows designated users to enter and update their agencies' RACT/BACT/LAER control technology determinations directly, rather than mailing input forms to EPA Headquarters for subsequent entry or correction. Now the PC-based Editor simplifies the process even further. While the on-line version of the RBLC data base allows users to share the latest determination information in a timely manner, on-line data entry has some drawbacks. On-line access requires a communication path, whether a modem and direct dial or an Internet connection, and response time may seem slow as RBLC users compete with other users accessing the growing number of applications on the TTN. To get around these drawbacks, the CATC has developed a standalone version of the RBLC Edit module for entering ***new*** determinations only.

The PC-based Editor is available to any users authorized to input determinations for their agency. All you need is a PC with a hard drive. Obtain a copy of the system by downloading it from the Products section of the CATC web site. Follow the straightforward installation procedure, and you are ready to use the standalone Editor. After entering new determinations with the Editor, forward the data to the RBLC for inclusion on the TTN. As with on-line submittals, the data is initially placed into a searchable transient data base where quality assurance procedures are performed. Once the data is checked, it is promoted into the current RBLC data base. The on-line Edit option gives you access to any of your agency's current entries on the RBLC BBS.

Installing the Editor

The RBLC Editor is an independently executable program designed to run on an IBM-compatible PC. (The system was not designed to operate on a LAN). No special software licenses are required. To run the RBLC Editor, you need an IBM-compatible PC with a hard drive that has at least 2 Mbyte free disk space. (The system itself uses about 1 Mbyte, and you should have around 1 Mbyte for your data files). You also should have the latest versions of the file compression programs PKZIP and PKUNZIP (version 2.04G). You can find these programs on the TTN in the System Utilities section. The editor runs fine under DOS, Windows 3.x, or Windows 95.

The quickest way to get started with the Editor is to download a compressed version of it from the RBLC web site (or the BBS). To install the download version of the system, follow these steps.

1. Download the file for the standalone editor from the documents section of RBLC web site. On the RBLC BBS, the file name is `RBLCEDIT.ZIP`.

2. On your hard drive, create a directory named \RBLC.

3. Change your working directory to \RBLC and decompress the ZIP file, using PKUNZIP.

4. Copy the file RBLCEDIT.BAT to your root directory. This batch file lets you run the RBLC Editor without modifying your path. It also sets an environment variable needed by the Editor.

5. If you do not already have a copy of the latest version of PKZIP, download this file from the TTN System Utilities menu. Place the file PKZIP.EXE in the \RBLC directory or in a directory that is part of your path.

6. To run the RBLC Editor, type RBLCEDIT at the DOS prompt.

Using the Editor to Build Your Data Base

The standalone PC-based Editor works in much the same way as the on-line RBLC data entry module available on the TTN to authorized users. When you have completed the data entry (remember, only new determinations can be entered using the standalone Editor), you e-mail (or mail) your data files to EPA for inclusion in the on-line RBLC data base.

To use the Editor, type "RBLCEDIT" from the DOS prompt on your PC (or execute the file RBLCEDIT.BAT in the directory you created). An introductory screen appears followed by the Main menu (Figure 6.1). The Main menu has options to edit determinations, generate a report file from the data, and prepare data files for uploading. If you have any questions about what to enter, press <F1> for context-sensitive help.

Begin by selecting the <B> option to add one or more new determinations to your data base. When you choose this option, the facility list appears (Figure 6.2).

Enter the record number to edit a previously entered determination that you want to update. You can select one or more determinations from this list to edit. Select <Z> to delete ALL of the determinations in your data base. Use this option if you want to start over or if you have already forwarded your data to the RBLC System Administrator.

The options at the Edit menu work like their counterparts in the on-line Edit module. For details on how to add or modify determinations with the RBLC Editor, refer to Part 5 of this User's Manual. Be sure to look at the submittal form and instructions for completing it. This form may assist you in preparing your data for input.

This list displays all determinations currently in your PC data base. If you have not entered any determinations into your data base yet, the system forces you to add a facility before displaying

the facility list. You can add or change facilities from the facility list. To delete a facility, you must move to the facility data screen.

```
RBLC EDITOR                          MAIN MENU                    DATE: 04/01/1998


                <B>   EDIT RBLC DATA BASE

                <R>   CREATE REPORT FROM DATA BASE

                <F>   PREPARE FILES FOR UPLOADING

                <X>   EXIT TO DOS


 Enter  |        Press the appropriate letter to select option
 Option |                 or press <F1> for HELP.
```

Figure 6.1 - Editor Main Menu

```
RBLC EDIT                          FACILITY LIST                  DATE: 04/01/1998
Record
Number     RBLC ID        Facility Name

1      I   VA-0003        QUEBECOR PRINTING RICHMOND
2      C   VA-0002        ROANOKE ELECTRIC STEEL CORPORATION
3      I   VA-0001        VPI & STATE UNIVERSITY
4      I   VA-0004        VPI POWER PLANT


                "C" = Complete       "I" = Incomplete       "D" = Deleted

 Enter  | Enter Record Number to Edit a Facility.                <F1> HELP
 Option | <A>dd a New Facility                        <Ctrl><R> to Page Up
 i      | E<X>it to MAIN Menu  <Z>ap All Facilities <Ctrl><C> to Page Down
```

Figure 6.2 - Facility List

Select <A> to add a new determination. When you add a determination, the standalone Editor assigns a temporary RBLC ID. Use these IDs if you want to update determinations entered on your local PC. **Permanent RBLC IDs will be assigned by the RBLC System Administrator when your data is added to the on-line data base.**

Make as many additions or changes as you like with the RBLC Editor. You can even add processes (something you cannot do on the RBLC BBS). All data is local to your PC until you transfer your files to the RBLC System Administrator. **Please note that you cannot use the standalone editor to edit determinations previously entered into the on-line RBLC data base.**

Creating a Report from Your Data Base

The Report option lets you create an ASCII text file of your data that you can print if you want a hard copy of your data. Of course, you could also wait until your determinations are added to the on-line data base, and then use one of the Query download formats to get a formatted copy of your data. When you select the <R> option from the Main menu, the Report menu appears (Figure 6.3).

```
RBLC EDITOR                    REPORT MENU                    DATE: 04/01/1998

                <A>   REPORT DATA ENTERED AFTER   /  /

                <R>   CREATE REPORT FILE

                <X>   EXIT TO MAIN MENU

 Enter   |        Press the appropriate letter to select option
 Option  |                or press <F1> for HELP.
```

Figure 6.3 - Report Menu

The Report menu gives you a choice of reporting all or only part of your data. The program uses the date you first added a determination to your data base in deciding whether or not to include an individual determination in the report. When you select <A> from the Report menu to enter a beginning date for your report, the cursor moves to the date field on the menu (Figure 6.4). Enter

any date in a MM/DD/YYYY format. The report will contain only the records entered on or after this date. If you want to report all your determinations, you do not need to specify a date.

```
RBLC EDITOR                    REPORT MENU                    DATE: 04/01/1998

                <A>   REPORT DATA ENTERED AFTER 07/01/1994

                <R>   CREATE REPORT FILE

                <X>   EXIT TO MAIN MENU

 Enter     Enter a date if you want to report only the determinations
 Option    added after this date.  Leave date blank to report all data
   A      <Esc> to Abandon
```

Figure 6.4 - Entering a Date for a Partial Report

The system displays the number of determinations that were added on or after the specified date (Figure 6.5). If this is not the number of records you want, select <A> again and enter a different date. Press <Ctrl-Y> when you are in the date field to erase the date you had previously entered if you decide to report all the data.

To create a formatted report of your determinations, select <R> from the Report menu. This option creates an ASCII text file in the same format as the Freeform download format available in the on-line Query module. A pop-up box appears for you to enter a file name for the TXT report file. After you have specified a file name, the system generates the report, displaying a status counter at the bottom of the screen (Figure 6.6) as it writes the report. When the report is complete, the display changes to show the name of your file.

The report generator creates the file in the directory with the other files for the Editor. Follow your normal procedures for printing an ASCII text file.

```
RBLC EDITOR                    REPORT MENU                    DATE: 04/01/1998

                <A>   REPORT DATA ENTERED AFTER 07/01/1994

                <R>   CREATE REPORT FILE

                <X>   EXIT TO MAIN MENU

 Enter          3 determinations found for report.
 Option
   A              Press any key to continue. . .
```

Figure 6.5 - Number of Records for Report Display

```
RBLC EDITOR                    REPORT MENU                    DATE: 04/01/1998

                <A>   REPORT DATA ENTERED AFTER      /

                <R>   CREATE REPORT FILE

                <X>   EXIT TO MAIN MENU

 Enter
 Option        Please Wait   . Creating File for Report ...
   R       <S>top Report                                  2 determinations
```

Figure 6.6 - Report Status Message

Compressing Your Data

The Editor stores your new control technology determinations in DBF data base files on your PC's hard drive. When you are finished editing the data, you should return the data to EPA for inclusion in the on-line RBLC data base. To simplify the process of transferring your data to the RBLC, the Editor includes a command to compress your data files into a single ZIP file.

From the Main menu, select the <F> option to prepare your files for uploading to EPA. When the system prompts you (Figure 6.7), enter any valid DOS file name for the ZIP file that you want to hold the compressed version of your data base. After you specify a file name, the system goes to DOS, runs PKZIP to create a ZIP file with your data base files, and returns to the Main menu. The compression software `PKZIP.EXE` must be on your hard drive in the `\RBLC` directory or accessible via your path statement for this option to work.

```
RBLC EDITOR                    MAIN MENU                    DATE: 04/01/1998


                <B>   EDIT RBLC DATA BASE

                <R>   CREATE REPORT FROM DATA BASE

                <F>   PREPARE FILES FOR UPLOADING

                <X>   EXIT TO DOS
                                  Enter File Name: NEWDATA

 Enter   Enter a name for the ZIP file you want to hold the data base.
 Option
   F     <Esc> to Abandon                                  <F1> for HELP
```

Figure 6.7 - File Name Prompt Box

The system displays a warning message if you use a file name that already exists and prompts you to confirm overwriting the file with that same name (Figure 6.8). If you do not want to write over the existing file, answer "N" and specify a different file name. Answer "Y" if you want the Editor to write over the existing file.

```
RBLC EDITOR                          MAIN MENU                    DATE: 04/01/1998

                <B>   EDIT RBLC DATA BASE

                <R>   CREATE REPORT FROM DATA BASE

                <F>   PREPARE FILES FOR UPLOADING

                <X>   EXIT TO DOS
                                        Enter File Name: NEWDATA

 Enter
 Option
   F                        *** FILE ALREADY EXISTS ***
                                 OVERWRITE ? N
```

Figure 6.8 - Existing File Warning

After you have specified a name for the compressed file, the system goes to DOS and runs PKZIP to create a ZIP file with your data base files. The system displays a status message when it is finished and returns to the Main menu. If you have any problems using the <F> option, you can exit from the Editor and compress your data files directly at the DOS prompt. Change to the directory that contains the Editor and type:

```
PKZIP filename USR*.DBF
```

where filename is any valid DOS file name. PKZIP will automatically add the .ZIP extension to the file name.

Transferring Your Determinations to the RBLC

Periodically, you should send your determinations to the RBLC System Administrator for review and inclusion in the RBLC transient data base on the BBS. You can either e-mail the data files to the TTN or copy them to a diskette and mail it to EPA. The RBLC System Administrator will review the determinations for accuracy and completeness and then add your data to the on-line data base.

You can e-mail your compressed data by attaching the ZIP file to an e-mail message to Joe Steigerwald, the RBLC System Administrator. Follow the appropriate procedures for your Internet mail program. Be sure to include your phone number in the body of the message, in case there are any questions about your submittal.

Send your e-mail address to the following address:

steigerwald.joe@epamail.epa.gov

TTN BBS users can upload compressed data by enclosing the ZIP file in a BBS e-mail message to the RBLC System Administrator. Follow these steps:

1. Select E-mail from the TTN BBS.

2. Choose <L> to send mail.

3. Specify `Joe Steigerwald` as the user who the message is to. You can type either uppercase or lowercase letters.

4. Enter a brief subject for the message, for example: `RBLC Determination`.

5. Confirm that the To: and Subj: fields are correct. If they are not, answer N and reenter the correct information.

6. Answer N to "Submit Prepared Msg Text(Y/N)?" and Y to "Use Full Screen Editor(Y/N)?" (Figure 6.9).

```
To: JOE STEIGERWALD
Subj: RBLC DETERMINATION
Is this correct(Y/N)? Y

Submit Prepared Msg Text(Y/N)? N
Use Full Screen Editor(Y/N)? Y
```

Figure 6.9 - BBS E-mail Prompts

7. Type your message, being sure to include your phone number. Press <Esc> to exit the Full Screen Editor when you are done entering the message text.

8. From the command prompt line displayed at the bottom of the screen, select <F> to enclose a file with your message. Confirm your choice and enter the file name (Figure 6.10). Follow the procedures for uploading a file with your communication software.

```
<L>ist, <V>iew, <E>dit, <R>cpt, <F>ile, <Q>uit, <S>end, or <H>elp? F

Enclose a file with this message(Y/N)? Y
Enter 1-12 char full file name: newdata.zip

File Name: newdata.zip
 Protocol: XMODEM

Ready to receive:
(Ctrl-X to abort)
```

Figure 6.10 - Enclosing a File with a BBS Message

9. When you have successfully uploaded your file, the system displays the file name and the command line prompt at the bottom of the screen. Select <S> to send the message.

If you do not have easy access to e-mail or the TTN BBS, you can copy the ZIP file to a diskette and mail it to:

Joe Steigerwald
RBLC, MD-12
U.S. Environmental Protection Agency
Research Triangle Park, NC, 27711

When your data is received at EPA, the RBLC System Administrator reviews it to make certain that all of the needed data files are there. Then your determination is assigned a permanent RBLC ID and added to the Transient data base. You are notified via mail that your determinations are on-line and what their RBLC IDs are. At this time, you will also be sent a QA/QC report that details any deficiencies in your submittal. Use the on-line Edit option to correct any problems with the new determinations.

S/L Directors, BC's file NSR

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Office of Air Quality Planning and Standards
Research Triangle Park, North Carolina 27711

RECEIVED
MAR 28 1994
AIR AND RADIATION DIVISION
U.S. EPA, REGION V

MAR 22 1994

MEMORANDUM

SUBJECT: Identification of Candidates for Best Available Control Technology (BACT) Determinations

FROM: John S. Seitz, Director
Office of Air Quality Planning and Standards (MD-10)

TO: Director, Air, Pesticides and Toxics Management Division, Regions I and IV
Director, Air and Waste Management Division, Region II
Director, Air, Radiation and Toxics Division, Region III
Director, Air and Radiation Division, Region V
Director, Air, Pesticides and Toxics Division, Region VI
Director, Air and Toxics Division, Regions VII, VIII, IX, and X

This memorandum addresses an issue which has been raised to me, most recently by the American Forest & Paper Association, concerning the roles of the Environmental Protection Agency's (EPA's) various offices in the identification of potential control options for consideration in the determination of BACT for prevention of significant deterioration purposes.

In broad overview, the initial responsibility for identifying candidate control options for consideration as BACT usually lies with the applicant, and the permitting authority may suggest certain additional options for consideration. The permitting authority independently reviews the applicant's proposal to assess its adequacy. Thus, ultimately, the permitting authority decides, on a case-by-case basis, what emissions limitation constitutes BACT. Any individual or representative of a public, private, or government organization or agency has the right to bring to the permitting agency's attention information on control options or technologies for consideration in BACT analyses. So long as the applicable

administrative procedures are followed, the permitting authority is at liberty to confer with any individual, organization, or agency at any time during the review process, regarding technical information on possible BACT candidates.

Applicants are responsible for considering all relevant data available to them, including recent new source review (NSR) permits, maximum achievable control technology (MACT) and reasonably available control technology (RACT) requirements, compliance with new source performance standards (NSPS), recent source-specific State implementation plan (SIP) requirements and negotiated settlement agreements to the extent the information is publicly available.

As you are aware, EPA has created a repository for such information called the RACT/BACT/LAER Clearinghouse (RBLC) which is run by the Emissions Standards Division. In the past, States only have voluntarily submitted BACT decisions to the RBLC [submission of lowest achievable emission rate (LAER) determinations is mandatory]. As a result, the Clearinghouse is currently not a complete data base. Consistent with recent recommendations to EPA by the NSR Reform Subcommittee of the Clean Air Act Advisory Committee, the EPA is considering more actively encouraging States, and Federal offices in some cases, to submit relevant control technology information to the RBLC. Indications are that the quality and quantity of data are improving. We are also planning to develop a bulletin board to publicize state-of-the-art technology applications and innovative approaches to controlling emissions.

As part of their oversight of State NSR programs, Regional Offices have the primary responsibility within EPA to assist permitting authorities in obtaining and analyzing all data relevant to a BACT decision. The Regions are also primarily responsible for initiating enforcement action in those instances where a State has not issued the necessary permit or has issued a permit that does not conform to legal requirements.

In terms of the Office of Air Quality Planning and Standards' involvement in the BACT process, the Air Quality Management Division is responsible for development of regulations, policies and guidance regarding BACT, including procedural requirements, evaluation criteria and review of innovative control technology waivers. The Stationary Source Compliance Division has the lead in enforcement and compliance issues associated with BACT. The Technical Support Division works to develop and improve emissions test methods for standards development and compliance, and develops emission factors for industrial processes, which may be used in BACT analyses. The

Emissions Standards Division, in addition to operating and maintaining the RBLC, develops NSPS and MACT standards, and writes control technology guidelines and alternative control technology documents, all of which may generate information on potential BACT candidates.

In summary, I would like to reiterate that the BACT determination is the responsibility of the permitting authority with jurisdiction over a particular permit application. However, any person, regardless of the office they work for (including EPA staff), has the right to provide a permitting authority with technical information on the availability or function of a control option or technology, or other information that is relevant to a BACT determination. This information includes the existence of any emissions limits or technology requirements that are included in publicly-available documents (i.e., permits, SIP's, enforcement settlements). Appropriate offices within EPA have an affirmative responsibility to assist in this effort. The EPA encourages anyone with information that they believe should be considered in a BACT analysis to bring this information to the attention of the permitting agency as early in the application review process as possible.

I hope this memorandum clarifies any concerns or issues regarding the input of relevant technical or policy information into a State or local permitting authority's BACT determination process. Please distribute copies of this memorandum to the respective permitting agencies in your Region. If you have further questions regarding these issues, please feel free to contact me, or have your staff contact David Solomon, Chief, New Source Review Section, at (919) 541-5375.

cc: Air Branch Chief, Regions I-X
G. Foote, OGC
J. Rasnic, SSCD
J. Domike, OECM
B. Jordan, ESD
B. Kellam TSD
K. Berry
E. Lillis
D. Solomon
D. Crumpler

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Office of Air Quality Planning and Standards
Research Triangle Park, North Carolina 27711

OBSOLETE

2 MAR 1989

MEMORANDUM

SUBJECT: Supplement to BACT/LAER Clearinghouse

FROM: Bob Blaszczak
Control Technology Center

TO: See Addressees

In a few short months EPA will publish the 4th (1989) Supplement to the "BACT/LAER Clearinghouse - A Compilation of Control Technology Determinations." To be included in the 1989 Supplement, your determinations must be submitted to me by no latter than April 28, 1989.

To facilitate your submittal, a copy of the BACT/LAER determination form is attached. Note that the BACT/LAER Clearinghouse contact has changed. Old, dated forms are still being used and are being misdirected because they are being mailed to former Clearinghouse contacts. Please avoid delays in entering your data into the BACT/LAER Information System (BLIS) by using the attached form and mailing it to the address indicated in the upper left-hand corner of the form.

Improvements to BLIS are now being considered which should improve its accessibility and usefulness. These improvements include a user-friendly, menu-driven user access system and inclusion of performance verification data. If you would like to comment on these proposed improvements, suggest additional improvements and/or tell us about problems you have experienced with BLIS, you can send your comments to me at the address indicated on the enclosed form or call (919) 541-5432 or (FTS) 629-5432.

Remember to get your BACT/LAER determinations in as soon as possible. If you have any questions concerning the BACT/LAER Clearinghouse or BLIS, please call me at the number indicated above.

Thank you.

Attachment

Addressees
BACT/LAER Clearinghouse Contacts
at State and Local Air Pollution Control Agencies
EPA Regional Offices

Mail to:

Source Code

Date of This Report

BACT/LAER For New/Modified Source:

Date of Permit Issuance: _____

Permit No.: _____

Date of Estimated Start-up: _____

Determination Made By: _____ (Agency)

(Person Directly Knowledgeable About Permit) (Phone)

Permit Parameters: (List all processes subject to this permit)	Maximum Design Capacity	* Pollutant Regulated	Emission limit(s) units of emissions/ units of input	** Reg. reqmts. assoc. w/limit	Control equipment of process modification description	Efficiency %

Notes: _____

*Use the following abbreviations wherever possible: PM=particulate matter, SO_2=sulfur dioxide, NO_x=nitrogen oxides, CO=carbon monoxide, VOC=volatile organic compounds, VE=visible emission, TRS=total reduced sulfur, F=fluoride, Be=beryllium, H_2S=hydrogen sulfide, Hg=mercury, VC=vinyl chloride.

**Please use the following abbreviation: B=BACT, L=LAER, N=NSPS, H=NESHAP, A=NAAQS or PSD constraints, S=SIP, R=RACT, U=Unregulated.

Page __ of __

F-5

on updating the data input system to support entering RBLC determinations directly from the Web. If everything goes as planned, authorized users will be able to enter their agency's new determinations using the Web sometime in the Fall of 1999. Once this capability is available, the RBLC will notify authorized users of its availability.

Completed forms must be submitted to:

RBLC, ITG, ITPID
U.S. EPA
MD-12
Research Triangle Park, NC 27711

The RBLC staff will be making a concerted effort to improve quality control for data entering the system, but we need your help. Please take the time to read the instructions and properly complete all applicable items on the determination input form. There have been a number of questions on the input forms in the past. The instructions enclosed address most of these. One critical item is the process type code. It is critical that you clearly indicate the process name and process type code. If these are not correct, vague or misleading, it will be extremely difficult to identify relevant data when searching the data base. Use the "note" portion of the form to clarify your determination, especially if the source falls into one of the "other" categories which are included as catch-alls under most process type category headings. Another area of change this year involves New Source Review (NSR) information. The RBLC is currently revising its data base structure to include NSR data elements. This effort is currently scheduled to be complete in the Fall of 1999. The RBLC will be sending out additional information on these changes and their effect on data entry requirements later this summer. Please stay tuned.

The 1999 document will include all new determinations submitted to the RBLC from June 1998 through May 1999. To assist each agency, a summary that lists the number of determinations that each State or EPA Region has submitted during the period 10/97 through 9/98 has been enclosed.

I have also enclosed a copy of the letter from Bob Blaszczak to the RBLC State and Local Agency contacts sent with last year's annual request for new RBLC determinations that will hopefully serve to remind users of the initiative started last year to make the data in the RBLC more comprehensive. Please take the time to read it over one more time.

Thank you for your cooperation.

Sincerely,

Joe Steigerwald
RACT/BACT/LAER Clearinghouse

6 Enclosures

Enclosure 1

Submissions to RBLC by EPA Region and State for the Period October 1, 1997 through September 30, 1998.

EPA Region	State (number submitted)	Total
1	CT(1), ME(2), RI(1)	4
2	NY(1), PR(3)	4
3	DE(2), VA(2), PA(5)	9
4	AL(14), FL(1), SC(2), TN(1)	18
5	IN(5), MI(1), MN(3), OH(1)	10
6	NM(8), LA(4)	12
7	IA(2), MO(38)	40
8	CO(12), MT(2), ND(2), WY(18)	34
9	CA(53)	53
10	OR(3)	3
Grand Total		187

OEPA inter-office communication

to: Distribution date: February 2, 1994

from: Mike Hopkins, AQM&P and Clara Dailey, PMU

subject: Permitting of sources under PTI Registration status

After receiving the first Registration PTI worksheets, we have found that there are a few areas that need clarification. We want to provide you with further guidance on how to determine if a source qualifies for Registration status, as well as how the worksheet should be submitted to Central Office.

Several important things to consider when Registration is requested are:

The source must emit less than 5 tons/year of uncontrolled, potential emissions to qualify for Registration. A source can have control and receive Registration, but we must still decide on the basis of the uncontrolled emission rate. This amount is per source, and not per permit. Also, a source can have up to 5 tons of each pollutant, not the total of all pollutants.

No NSPS sources can be placed on Registration status. This includes storage tanks.

NESHAP or hazardous air pollutant sources that USEPA has promulgated a standard for cannot be placed on Registration.

Sources that are installed or that began construction prior to October 8, 1993 cannot be placed on Registration status; this status did not exist at that time, therefore, a PTI is required.

ORC 3745.11(J) states that for sources installed after July 1, 1993, the PTI fee will be doubled to received a permit issued after January 1, 1994. This is for all PTI's and Registration PTI's. Therefore, for sources qualifying for Registration that have been installed (or began construction) after October 8, 1993, but have not received any permit, the fee doubles for those permits issued after January 1, 1994, so please figure the fee appropriately.

There are several things that Central Office needs with the Registration worksheets:

If a source is subject to the Air Toxics Policy, please include a New Source Review Coding Form so that a toxic review can be performed, or send us a copy of the modeling if you do it.

When submitting PTI Registration forms, please include all calculations for controlled and uncontrolled emissions, verifying that the source emits less than 5 tons/year uncontrolled. Also, include a short note as to the source of the numbers used in the calculations. For example, if a number is obtained from a manufacturer, include a note off to the side stating that this number came from the manufacturer. This should be done for all PTI's.

The construction status is important, so make sure that you include the date on the worksheet when construction began, if already started. The installation schedule for each source should be included with the Registration package, just like it should be for a PTI worksheet.

When Registration status is requested, but you determine that a source cannot be placed on a Registration PTI, you should notify the source as soon as possible. We only have 60 days to notify the applicant if Registration is not applicable, and Central Office has received some Registration worksheets that must be full PTI's very close to the 60 day deadline. We want to emphasize that you must review these early on to determine if they qualify for Registration or not.

When we have noticed any registration worksheets submitted that should really be PTI's, we have generally changed the worksheet and processed the paperwork as a PTI, and notified the field office.

There are pollutants (other than VOC, PM, SO2 and NOx) that are not listed in the rule that are emitted alone or in combination with other listed pollutants from a source. Central Office is reviewing the rule to determine if a source should be placed on Registration in these cases, and what the cutoffs should be for these pollutants to allow Registration. For CO, the determination at this time is that if a source emits less than 5 TPY of CO, it can be placed on Registration, otherwise it needs a PTI. Sources emitting ozone are not to be placed on Registration.

And finally, please fill out your forms as expeditiously as possible. Your cooperation is greatly appreciated.

MH/CD/MP/SG

<u>Distribution</u>

Don Cavote, CDO
Doug Seamen, Cleveland
Jerry Garro, Akron
John Paul, RAPCA
Bruce Blankenship, Canton
Dennis Bush, NEDO
Don Walden, Portsmouth
Jim Braun, AQM&P
Misty Parsons, AQM&P
Tom Rigo, F.O.
Judy Zimomra, Cleveland
Fred Klingelhafer, SEDO
Phil Henrichs, SWDO
Gerry Rich, NWDO
Harold Strohmeyer, NOVAA
Barry Burton, Cincinnati
Don Moline, Toledo
Alan Lloyd, AQM&P
Sara Geary, PMU

Ohio EPA
Division of Air Pollution Control

inter-office communication

To: Central and District Offices DAPC Staff, Local Air Agencies

From: Bob Hodanbosi, Chief

Subject: Small Business Assistance Program

Date: April 27, 1995

The Small Business Stationary Source Technical and Environmental Compliance As Program authorized under Section 507 of the 1990 Clean Air Act Amendments was to help small businesses that lack the technical or financial capabilities to requirements. Ohio's program is now underway and I want to explain the progra and how its function relates to other parts of the Division of Air Pollution C program has three elements:

- The **Small Business Assistance Program** managed by the Division of Air Poll Control will provide technical assistance on such compliance issues as ap requirements, permitting, and alternative compliance methods. The progra have employees in Central Office and will expand to include staff located parts of Ohio so they are more accessible by smaller businesses throughou The supervisor for this program is Rick Carleski. Rick comes from the ai in the Northwest District Office.

- The **Small Business Ombudsman** will be located at the Ohio Air Quality Development Authority. Mark Shanahan has been named as the Small Busines Ombudsman. The Ombudsman's office will serve as an advocate for small bu and will perform outreach to the small business community. The Ombudsman will administer the Small Business Assistance Fund to provide financial a small businesses in their purchase of air pollution control equipment.

- The **Compliance Assistance Panel** will be comprised of members selected by General Assembly, the Governor and Ohio EPA. The panel's function is to broad oversight for the technical assistance and ombudsman programs. App to this panel are forthcoming.

In the Amendments, Congress gave its own definition of a small business that i assistance under the program. An eligible small business is a stationary sour

- Is owned or operated by a person employing 100 or fewer individuals;

- Is a small business concern as defined in the Small Business Act;

- Is not a major stationary source as defined in Titles I and III of the Cl Amendments;

- Does not emit 50 tons per year of any regulated pollutant; and

※ Emits fewer than 75 tons per year of all regulated pollutants

Legislative authority for Ohio's SBAP was granted in Senate Bill 153, the law authorized our Title V program. One key feature of Ohio's program is that it confidentiality to small businesses seeking help under the program. This conf serve as an incentive to those businesses that ordinarily would be reluctant t compliance issues for fear of enforcement. This confidentiality does not gran from enforcement actions taken as a result of routine or complaint-driven insp

1. The SBAP will keep confidential information regarding violations detected program, including names and locations of businesses. As required by U.S program will provide emissions data and general statistical information s types of noncompliance being encountered, costs of compliance, etc. The also conduct follow-up audits to determine the extent to which the progra compliance among participating industries.

2 DAPC's enforcement program is not prohibited from taking action against s businesses who are receiving SBAP assistance. However, considering that and local air agency staff are granted enforcement discretions, the enfor program may consider a company's good faith efforts to achieve compliance participating in the SBAP as a mitigating factor in determining the appro enforcement response or civil penalty.

The SBAP will act independently of our enforcement program. The purpose of confidentiality is not to circumvent or hinder enforcement. As much as possib eliminate any inconsistencies in the messages and compliance advice between SB permit staff. For this reason, I do expect that SBAP staff will from time to compliance issues with engineering staff. It is important for us to present a message to our customers.

Similarly, some of you may be asked to review written materials for technical hope you will support the SBAP staff in this and other endeavors as the progra in the weeks ahead.

BH/klu

cc Don Schregardus, Director
All Deputy Directors
All Division and District Office Chiefs
Department of Development

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF ENFORCEMENT

MEMORANDUM

DATE: December 18, 1978

SUBJECT: Interpretation of "Constructed" as it Applies to Activities Undertaken Prior to Issuance of a PSD Permit

FROM: Director Division of Stationary Source Enforcement

TO: Enforcement Division Directors Regions I-X

Air and Hazardous Materials Division Directors Regions I-X

The issue addressed in this memorandum is where on the continuum from planning to operation of a major emitting facility does a company or other entity violate the PSD regulations if it has not yet received a PSD permit. (It is assumed here that such a permit is required by the PSD regulations.) This question has arisen several times in particular cases and general guidance now appears necessary.

The statute and regulations do not answer this question. The Clean Air Act states simply that, "[n]o major emitting facility ... may be constructed ... unless - (1) a permit has been issued ... [and various other conditions have been satisfied]." Section 165(a). Similarly, the PSD regulations state that, "[n]o major stationary source or major modification shall be constructed unless the [various PSD requirements are met]." 40 CFR 52.21(i)(1), 43 FR 26406. "Construction" is defined in the regulations as "fabrication, erection, installation, or modification of a source. " 40 CFR 52.21(b) (7), 43 FR 26404. This accords with Section 169 (2) (C) of the Act, but it does not explicitly answer the question posed above. To our knowledge, the legislative history of the Act does not treat this issue. Thus the term "constructed" seems to be open to further interpretation by EPA.

Commencement of construction is quite specifically defined in both Section 169(2)(A) of the Clean Air Act and 40 CFR 52.21(b)(8), 43 FR 26404. However, that definition is for the purpose of deciding the threshold question of the applicability of the PSD regulations. Therefore, we are not bound by it in deciding what activities may be conducted prior to receiving a necessary PSD permit.

DSSE's response to date has been that the permitting authority should make the determination on a case-by-case basis, after considering all the facts of the individual situation. For example, we said that site clearing might be inappropriate for a source proposed to be constructed in a heavily forested Class I area, but permissible for a source proposed to be constructed on a junk-strewn lot in a heavily industrialized Class III area.

After consulting with the Office of General Counsel, we are now amending this policy in order to minimize the administrative burden on the permitting authority and to adopt what we believe now to be the better legal interpretation. The new policy is that certain limited activities will be allowed in all cases. These allowable activities are planning, ordering of equipment and materials, site-clearing, grading, and on-site storage of equipment and materials. Any activities undertaken prior to issuance of a PSD permit would, of course, be solely at the owner's or operator's risk. That is, even if considerable expense were incurred in site-clearing and purchasing equipment, for example, there would no guarantee that a PSD permit would be forthcoming. All on-site activities of a permanent nature aimed at completing a PSD source for which a permit has yet to be obtained are prohibited under all circumstances. These prohibited activities include installation of building supports and foundations, paving, laying of underground pipe work, construction of permanent storage structures, and activities of a similar nature.

The new policy has several advantages. First, it will be easy to administer, since case-by-case determinations will not be required. Moreover, it assures national consistency and permits no abuse of discretion. Finally, it appears to be the most legally correct position. The policy has the undeniable disadvantage of allowing a good deal of

activity at sites which may be highly susceptible to environmental impact. We feel that on balance, however, the advantages of the policy outweigh the disadvantage.

If you any questions, please feel free to contact David Rochlin of my staff, at 755-2542.

Edward E. Reich

cc: Peter Wyckoff, OGC
Richard Rhoades, OAQPS
Linda Murphy, Region I
Ken Eng, Region II
Jim Sydnor, Region III
Winston Smith, Region IV
Steve Rothblatt, Region V
Don Harvey, Region VI
Bob Chanslor, Region VII
Dave Joseph, Region VIII
Bill Wick, Region IX
Mike Johnston, Region X

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

Mike H

AUG 25 1999

REPLY TO THE ATTENTION OF
AE-17J

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Robert Hodanbosi, Chief
Division of Air Pollution Control
Ohio Environmental Protection Agency
Lazarus Government Center
P.O. Box 1049
Columbus, Ohio 43216-1049

Re: DaimlerChrysler Corporation
Toledo, Ohio Facility

Dear Mr. Hodanbosi:

Enclosed is a copy of a Notice of Violation issued this date by the United States Environmental Protection Agency to DaimlerChrysler Corporation, Toledo, Ohio, for DaimlerChrysler Corporation's violations of Section 165 of the Clean Air Act ("CAA" or "Act") and 40 C.F.R. § 52.21. This Notice of Violation has been issued pursuant to Section 113(a)(1) of the Act, 42 U.S.C. § 7413(a)(1).

Specifically, DaimlerChrysler Corporation is in violation of Section 165(a) of the Act, and 40 C.F.R. § 52.21 for failing to obtain an effective Prevention of Significant Deterioration ("PSD") permit prior to beginning actual construction of a major emitting facility.

Section 113 of the CAA authorizes the commencement of an enforcement action 30 days following the date of issuance of the Notice of Violation. It is our hope that this Notice of Violation will substantially aid efforts to obtain immediate compliance with the CAA.

Sincerely yours,

Margaret M. Guerriero, Acting Director
Air and Radiation Division

Enclosure

Recycled/Recyclable • Printed with Vegetable Oil Based Inks on 50% Recycled Paper (20% Postconsumer)

cc: William J. Garber, Acting Manager
City of Toledo
Division of Environmental Services

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

AUG 25 1999

REPLY TO THE ATTENTION OF

AE-17J

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. Roy Attard, Supervisor,
Advance Facilities Building Construction,
Assembly Manufacturing Engineering
DaimlerChrysler Corporation
1000 Jeep Parkway
Toledo, Ohio 43657

Dear Mr. Attard:

The enclosed Notice of Violation is issued this date pursuant to Section 113(a)(1) of the Clean Air Act ("CAA"), 42 U.S.C. § 7413(a)(1), to notify DaimlerChrysler Corporation that the Administrator of the United States Environmental Protection Agency ("U.S. EPA") finds DaimlerChrysler Corporation's Toledo Facility to be in violation of Section 165 of the Clean Air Act and 40 C.F.R. § 52.21.

Section 113(a)(1) of the CAA, 42 U.S.C. § 7413(a)(1), authorizes the Administrator to initiate an enforcement action 30 days following the date of issuance of this Notice of Violation. U.S. EPA's enforcement options include the issuance of an administrative order requiring compliance with the CAA, an administrative order pursuing penalties, or the commencement of civil or criminal actions. In addition, Section 306 of the CAA, 42 U.S.C. § 7606, provides that facilities in noncompliance with the CAA may become ineligible for Federal contracts, grants or loans.

U.S. EPA is offering DaimlerChrysler Corporation an opportunity for a conference to discuss the violations that are the subject of this Notice. The conference will afford DaimlerChrysler Corporation an opportunity to present information bearing on the findings of violation and on the nature of the violations.

Recycled/Recyclable • Printed with Vegetable Oil Based Inks on 50% Recycled Paper (20% Postconsumer)

The U.S. EPA contacts in this matter are Yasmine Wadia and Reginald Pallesen. Please contact Ms. Wadia at (312) 886-4035 or Mr. Pallesen at (312) 886-0555 to request a conference. Such a request should be made as soon as possible, but not later than 10 days from receipt of this Notice. Any conference must be held within 30 days from receipt of this Notice.

Sincerely yours,

Margaret M. Guerriero, Acting Director
Air and Radiation Division

Enclosure

cc: Patrick M. Raher, Partner
Hogan & Hartson L.L.P.

William J. Garber, Acting Manager
City of Toledo
Division of Environmental Services

Robert Hodanbosi, Chief
Division of Air Pollution Control
Ohio Environmental Protection Agency

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5

IN THE MATTER OF:	)	
	)	
DaimlerChrysler Corporation	)	**NOTICE OF VIOLATION**
Toledo, Ohio	)	**EPA-5-99-OH-40**
	)	
Proceedings Pursuant to the	)	
Section 113 of the Clean Air Act,	)	
42 U.S.C. § 7413	)	

STATUTORY AUTHORITY

The United States Environmental Protection Agency (U.S. EPA) is issuing this Notice of Violation pursuant to Section 113(a)(1) of the Clean Air Act ("Act"), 42 U.S.C. § 7413(a)(1). You are hereby notified that the Administrator of the United States Environmental Protection Agency, by authority duly delegated to the undersigned, finds DaimlerChrysler Corporation, Toledo, Ohio, to be in violation of Part C of the Act and 40 C.F.R. § 52.21. Specifically, DaimlerChrysler Corporation is in violation of Section 165(a) of the Act and the Ohio State Implementation Plan at 40 C.F.R. § 52.21 for failing to obtain an effective Prevention of Significant Deterioration ("PSD") permit prior to beginning actual construction of a major emitting facility.

STATUTORY AND REGULATORY AUTHORITY

1. Section 110 of the Act, 42 U.S.C. § 7410, requires States to adopt, and submit to the U.S. EPA for approval, State Implementation Plans ("SIPs") providing for the implementation, maintenance, and enforcement of the National Ambient Air Quality Standards ("NAAQS") promulgated by U.S. EPA pursuant to Section 109 of the Act, 42 U.S.C. § 7409.

2. Part C of the Act, 42 U.S.C. § 7470-7491, requires the Administrator to promulgate regulations to prevent the significant deterioration of air quality in areas designated as attainment or unclassifiable in accordance with Section 107(d) of the Act, 42 U.S.C. § 7407(d). In accordance with the Act, the Administrator promulgated regulations at 40 C.F.R. § 51.166 setting forth SIP approval requirements for the prevention of significant deterioration of air quality.

3. Section 161 of the Act, 42 U.S.C. § 7471, and 40 C.F.R. § 51.166(a)(1) require the States to submit SIPs containing emission limitations and other measures necessary to prevent the significant deterioration of air

quality. Pursuant to Section 110(a) of the Act, 42 U.S.C. § 7410(a), the Administrator determined the Ohio SIP did not satisfy the measures required to ensure the prevention of significant deterioration of air quality. As a result, the Administrator disapproved the PSD portion of the Ohio SIP, 40 C.F.R. § 52.1884(a).

4. In accordance with Section 110(c) of the Act, 42 U.S.C. § 7410(c) and 40 C.F.R. § 52.21(a), the Administrator incorporated the provisions of 40 C.F.R. § 52.21(b) through (w) [PSD Regulations] as part of the Ohio SIP, 40 C.F.R. § 52.1884(b).

5. "Major stationary source" is defined at 40 C.F.R. § 52.21(b)(1)(i) as, among other things, any chemical process plant that emits or has the potential to emit, 100 tons per year of any air pollutant subject to regulation under the act.

6. "Major modification" is defined at 40 C.F.R. § 52.21(b)(2)(i) as "any physical change in or change in the method of operation of a major stationary source that would result in a significant net emissions increase of any pollutant subject to regulation under the Act."

7. "Construction" is defined at 40 C.F.R. § 52.21(b)(8) as "any physical change or change in the method of operation (including fabrication, erection, installation, demolition, or modification of an emissions unit) which would result in a change in actual emissions."

8. "Begin actual construction" is defined at 40 C.F.R. § 52.21(b)(11) as "initiation of physical onsite construction activities on an emissions unit which are of a permanent nature. Such activities include, but are not limited to, installation of building supports and foundations, laying underground pipework and construction of permanent storage structures. With respect to a change in method of operations, this term refers to those onsite activities other than preparatory activities which mark the initiation of the change."

9. "Significant" is defined at 40 C.F.R. § 52.21(b)(23)(i) as "net emissions increase or the potential of a source to emit any of the following pollutants, a rate of emissions that would equal or exceed any of the following rates" including but not limited to: "100 tons per year (TPY) CO, 40 TPY of NO_x, 40 TPY of SO_2, 25 TPY of Particulate Matter and 40 tpy of volatile organic compounds for Ozone."

10. 40 C.F.R. § 52.21(i) states "no stationary source or modification to which the requirements of paragraphs (j) through (r) of this section shall begin actual construction without a permit which states that the stationary source or modification would meet those requirements."

11. Section 165(a) of the Act states, *inter alia*, that no major emitting facility may be constructed or modified unless a permit has been issued in accordance with requirements of Part C of the Act.

12. The issuance and effective dates for a PSD permit are regulated under 40 C.F.R. § 124.15.

13. 40 C.F.R. § 124.15(a) states, "After the close of the public comment period under § 124.10 on a draft permit, the Regional Administrator shall issue a final permit decision..." Pursuant to this requirement, the Ohio Environmental Protection Agency ("Ohio EPA") issued a Permit to Install to Chrysler Corporation on June 26, 1998.

14. 40 C.F.R. § 124.15(b)(1) states, "A final permit decision... shall become effective thirty (30) days after the service of notice of the decision unless... a later effective date is specified in the decision..."

15. 40 C.F.R. § 124.20(d) states, "Whenever a party or interested person has the right or is required to act within a prescribed period after the service of notice or other paper upon him or her by mail, 3 days shall be added to the prescribed time."

16. The Permit to Install issued to Chrysler Corporation by Ohio EPA on June 26, 1998 states under the PSD requirements section, "In accordance with 40 C.F.R. 124.15, 124.19, and 124.20, the following shall apply: (1) the effective date of this permit shall be 30 days after the service of notice to any public commentors of the final decision to issue, modify, or revoke and re-issue the permit, unless the service of notice is by mail, in which case the effective date of the permit shall be 33 days after the service of notice..."

17. 40 C.F.R. § 52.21(r) provides, *inter alia*, that any owner or operator of a source subject to the PSD regulations who constructs or operates a source or modification not in accordance with the application submitted pursuant to this section or with the terms of any approval to construct or any owner or operator of a source or modification subject to this section who commences construction after the effective date of these regulations without applying for and receiving approval hereunder, shall be subject to appropriate enforcement action.

18. 40 C.F.R. § 52.23 provides, *inter alia*, that failure to comply with any provisions of 40 C.F.R. Part 52, or with any approved regulatory provision of a SIP or with any permit condition, or with any permit limitation or condition contained within an operating permit issued under an EPA-approved program that is incorporated into the SIP, subjects the person or governmental entity so failing to comply in violation of a requirement of an applicable implementation plan and

subject to enforcement action under Section 113 of the Act.

FACTUAL BACKGROUND

19. DaimlerChrysler Corporation is located at 1000 Jeep Parkway, Toledo, Ohio in Lucas County.

20. DaimlerChrysler Corporation operates a motor vehicle assembly plant.

21. Lucas County is an area presently classified as attainment or unclassifiable for all criteria pollutants, with the exception of SO_2. 40 C.F.R. Subpart B, § 81.336.

22. On June 26, 1998, OEPA issued a PSD permit to Chrysler Corporation for the construction of the New Toledo Assembly Plant. OEPA issued a Citizen Advisory noticing issuance of the PSD permit by mail on June 30, 1998. Therefore, pursuant to the regulations and the terms of the PSD permit, the PSD permit was not effective until August 3, 1998, 33 days after OEPA mailed the Citizen Advisory was mailed to commentors.

23. On June 16, 1998, Chrysler Corporation initiated construction of storm water sewers.

24. On July 27, 1998, Chrysler Corporation initiated construction of sanitary sewers

FINDINGS OF VIOLATION

25. By installing storm water sewers and sanitary sewers at the site of the New Toledo Assembly Plant prior to August 3, 1998, Chrysler Corporation (now DaimlerChrysler) began actual construction of the motor vehicle assembly plant prior to the effective date of its PSD permit, in violation of Section 165(a)(1) of the Act and the Ohio State Implementation Plan at 40 C.F.R. § 52.21(i)

NOTICE OF VIOLATION

The Administrator of the U.S. EPA, by authority duly delegated to the undersigned, notifies the State of Ohio and DaimlerChrysler Corporation that the facility described above is in violation of Section 165(a) of the Act, and the Ohio State Implementation Plan at 40 C.F.R. § 52.21, as set forth in this Notice of Violation.

8/24/99
Date

Margaret M. Guerriero, Acting Director
Air and Radiation Division

CERTIFICATE OF MAILING

Re: Notice of Violation at DaimlerChrysler Corporation, **Toledo, Ohio**

I, Loretta Shaffer, do hereby certify that a Notice of Violation Pursuant to the Clean Air Act was sent by Certified Mail, Return Receipt Requested, to:

Mr. Roy Attard, Supervisor,
Advance Facilities Building Construction,
Assembly Manufacturing Engineering
DaimlerChrysler Corporation
1000 Jeep Parkway
Toledo, Ohio 43657

I, Loretta Shaffer, certify that a copy of the Notice of Violation Pursuant to the Clean Air Act was sent by first class mail to:

Patrick M. Raher, Partner
Hogan & Hartson, L.L.P.
Columbia Square
555 Thirteenth Street, NW
Washington D.C. 20004-1109

William J. Garber, Acting Manager
City of Toledo
Division of Environmental Services
348 South Erie
Toledo, Ohio 43602

and

Robert Hodanbosi, Chief
Division of Air Pollution Control
Ohio Environmental Protection Agency
Lazarus Government Center
P.O. Box 1049
Columbus, Ohio 43216-1049

on the 26th day of August, 1999.

Loretta Shaffer

Loretta Shaffer, Secretary
AECAB (MN/OH)

P140 895 437
Certified Mail Article Number

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
RESEARCH TRIANGLE PARK, NC 27711

DEC 13 1995

OFFICE OF
AIR QUALITY PLANNING
AND STANDARDS

Mr. Charles W. Williams
Commissioner, Minnesota Pollution Control Agency
520 Lafayette Road
St. Paul, Minnesota 55155-4194

Dear Mr. Williams:

This is in response to your September 27, 1995 letter to Carol Browner requesting clarification from the United States Environmental Protection Agency (EPA) concerning the scope of construction-related activities that may occur prior to issuance of a Prevention of Significant Deterioration (PSD) permit under the Federal regulations at 40 CFR 52.21, which are also incorporated into Minnesota's rules. Your letter requests the EPA's interpretation on four related issues that are addressed below. The EPA's policy on most of the issue; is explained in the attached memorandum of March 28, 1986 entitled "Construction Activities Prior to Issuance of a PSD Permit with Respect to Begin Actual Construction" from Edward E. Reich, Director, EPA's Stationary Source Compliance Division (March 1986 Memo).

First, Minnesota interprets the Federal PSD regulation to allow an applicant to enter into binding agreements or contractual obligations prior to receiving a PSD permit. The PSD regulations at 40 CFR 52.21(i)(1) require an applicable source to obtain a PSD permit before it may "begin actual construction.' The PSD rules at 40 CFR 52.21(b)(11) define "begin actual construction" as the " -initiation of physical on-site construction activities on an emissions unit which are of a permanent nature.... With respect to a change in the method of operations, this term refers to those on-site activities other than preparatory activities which mark the initiation of the change." Since entering into binding agreements or contractual obligations is not prohibited under this definition, the EPA agrees with the Minnesota view that these activities are allowed under the Federal PSD rules prior to obtaining a PSD permit. We also agree that the owner or operator who chooses to undertake

these activities prior to obtaining the required PSD permit does so at its-own risk that a permit may not be issued or may not contain the terms the applicant desires.

Second, Minnesota interprets the Federal PSD rules to not prohibit site clearing activities prior to receiving a PSD permit, but that there is a prohibition on beginning construction activities that are of a permanent nature. The EPA agrees with Minnesota that site clearing and grading are not prohibited by this definition. Allowed preconstruction activities would also include ordering materials and temporary storage on site (see March 1986 memorandum).

Prohibited (permanent and/or preparatory) preconstruction activities under 40 CFR 52.21(b)(i)(1) and (b)(11) would include any construction that is costly, significantly alters the site, and/or permanent in nature. This would include, but is not limited to: (1) excavating, blasting, removing rock and soil, and. backfilling, and (2) installing footings, foundations, permanent storage structures, pipe, and retaining walls. See May 13, 1993 memorandum from John Rasnic to Region III, "Construction Activities at Georgia Pacific"(GP memo); see also November 4, 1993 memorandum from Dave Howekamp to Region IX, "Preconstruction Review and Construction Activities Prior to Permit Issuance."

As explained in the GP memo (and those preceding), absent a prohibition on any costly, significant or permanent preconstruction, affected sources could defeat the preconstruction requirement or its enforcement by making a costly, substantial, and/or permanent investment and later argue that retrofitting of PSD requirements or a denial of the permit would unreasonably interfere with their investment.

Further, it is EPA's longstanding policy that section 52.21(i) reasonably prohibits any preconstruction "intended to accommodate" an "emissions unit" or which is an "integral part of the source or modification." This is supported by the definition of "emissions unit" at 52.21(b)(7), which "means any part of a stationary source which emits or would have the potential to emit any pollutant . . . " (see March 1986 memo). The meaning of "intended to accommodate" was also discussed in the GP memo which states: "[i]f the construction activity is an integral part of the PSD source or modification, the source must obtain a PSD permit prior to construction. In other words, if the construction would not serve in accordance with its original intent except for inclusion of the emissions unit, such construction is prohibited prior to obtaining a PSD permit."

Finally, you have asked whether there is flexibility under the Clean Air Act (Act) or rules to allow construction of footings for emissions units without a PSD permit in cold weather States such as Minnesota. EPA's general view is that such an exemption is not authorized under the Act or the Federal PSD rules. Historically, foreseeable circumstances such as a short construction season have been factored into the design, planning, and permitting of any affected construction project. However, the EPA believes that Minnesota has raised legitimate concerns. As a part of the NSR Reform, such concerns were raised and considered, but no agreement was reached on specific changes to the NSR rules. EPA intends to ask the NSR Reform Subcommittee to consider again rule reforms that would address possible extenuating circumstances under which certain limited construction-related activities could take place prior to receipt of a final permit. In the interim, I encourage the State to continue its discussions with the Regional Office to develop a solution, within the current rules, that considers EPA's concerns about allowing certain construction-related activities prior*to receipt of a PSD permit. Specifically, should a source request to establish footings prior to cold weather without receiving the required PSD permit, the EPA may be willing to discuss compliance options, consistent with the'rules.

I hope this letter clarifies EPA's interpretation of the Federal PSD rules regarding permissible activities prior to obtaining a PSD permit. If you have any questions concerning the application or enforcement of the PSD rules, you may contact Ron Van Mersbergen of EPA Region 5 at (312) 886-6056.

Sincerely,

John S. Seitz
Director
Office of Air Quality Planning
and Standards

Enclosures

THE TEXT YOU ARE VIEWING IS A COMPUTER-GENERATED OR RETYPED VERSION OF A PAPER PHOTOCOPY OF THE ORIGINAL. ALTHOUGH CONSIDERABLE EFFORT HAS BEEN EXPENDED TO QUALITY ASSURE THE CONVERSION, IT MAY CONTAIN TYPOGRAPHICAL ERRORS. TO OBTAIN A LEGAL COPY OF THE ORIGINAL DOCUMENT, AS IT CURRENTLY EXISTS, THE READER SHOULD CONTACT THE OFFICE THAT ORIGINATED THE CORRESPONDENCE OR PROVIDED THE RESPONSE.

MEMO # 14.8

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF
AIR AND RADIATION

MAR 28 1986

SUBJECT: Construction Activities Prior to Issuance of a PSD Permit with Respect to "Begin Actual Construction"

FROM: Director
Stationary Source Compliance Division
Office of Air Quality Planning and Standards

TO: Robert R. DeSpain, Chief
Air Programs Branch, Region VIII

This memorandum addresses the interpretation of "begin actual construction" as it refers to construction activities which may occur, or are prohibited prior to issuance of a PSD permit under 40 CFR 52.21(i). The Control Programs Development Division of OAQPS, the Office of General Counsel, and the Air Enforcement Division of the Office of Enforcement and Compliance Monitoring were consulted in the development of this memorandum, and all three offices concur with its content.

Section 165(a) of the Clean Air Act states that "[n]o major emitting facility...may be constructed...unless - (1) a permit has been issued... [and various other requirements are satisfied]." Section 165 requirements, then, apply to major emitting facilities, i.e. major stationary sources. However, the PSD regulations at Section 52.21(i) (1) state that, "[n]o stationary source or modification... shall begin actual construction without a permit which states that the stationary source or modification... [has met various requirements]." The term "begin actual construction" at Section 52.21(b) (11) in the PSD regulations refers to "construction activities on an emissions unit." Emissions unit is defined at Section 52.21 (b)(7) as "...any part of a stationary source which emits or would have the potential to emit any pollutant subject

to regulation under the Act." Therefore, although applicability of PSD is determined on a source-wide basis, it may become necessary to distinguish the emissions unit from the major stationary source or modification in order to determine at what point in construction planning or construction activities a PSD permit is required.

The question of what type of construction activities may be conducted prior to issuance of a PSD permit has been covered by EPA policy for many years. On December 18, 1978 EPA issued policy addressing this issue. That memorandum specified that certain limited activities would be allowed, such as planning, ordering of equipment and material, site-clearing, grading, and on-site storage of equipment and materials. Any of these activities, if undertaken prior to issuance of a PSD permit, would be at the risk of the owner or operator. All on-site activities of a permanent nature aimed at completing a PSD source (including, but not limited to, installation of building supports and foundations, paving, laying of underground pipe work, construction of permanent storage structures, and activities of a similar nature) are prohibited until the permit is obtained, under all circumstances. This December 1978 policy defines the type of construction activities allowed at a PSD-affected source prior to issuance of a PSD

permit.

Since section 52.21 (i) (1) specifies that a source may not begin actual construction (on an emissions unit) until a PSD permit is obtained by that source, and "begin actual construction" at Section 52.21 (b) (11) refers to the emissions unit, it is necessary to clarify the definition of emissions unit. "Emission unit" as defined at Section 52.21 (b) (7) refers not only to units which emit pollutants subject to review under PSD, but to any part of the source which emits a pollutant subject to regulation under the Clean Air Act. By definition then, any part of a PSD source which would emit any pollutant subject to regulation under the Act is considered an emissions unit, even if that particular unit is not subject to PSD review. The emissions unit would include any installations necessary to accommodate that unit. Therefore, before issuance of the PSD permit, construction is prohibited on any emissions unit or on any installation designed to accommodate the emissions unit. If the emissions unit (including any accommodating installation) is an integral part of the

source or modification (i.e. the source or modification would not serve in accordance with its original intent, except for inclusion of the emissions unit), the PSD permit must be obtained before construction on the entire source commences.

The policy statement from 1978 reflects the current policy on the types of construction activities which are prohibited, or may occur at risk to the owner prior to issuance of a PSD permit. Language changes in the regulations after this guidance was issued did not alter EPA's interpretation of what a source may do prior to obtaining a PSD permit.

If you have any questions, please contact Sally M. Farrell at FTS 382-2875.

Edward E. Reich

cc: Kirt Cox, OAQPS
Gregory Foote, OGC
Douglas A. Johns, DOJ
Judith Katz, OECM
Tim Osag, Region VIII
NSR Regional Contacts

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
76 Hawthorne Street
San Francisco, Ca. 94105-3901

November 4, 1993

MEMORANDUM

SUBJECT: Preconstruction Review and Cons

FROM: Dave Howekamp
Director
Air and Toxics Division

TO: See Below

This memorandum reiterates EPA's longstanding interpretation concerning the range of construction related activities that lawfully may occur prior to the issuance of a permit to construct or modify a facility or emissions unit.

The Clean Air Act mandates a preconstruction review program for sources subject to Prevention of Significant Deterioration (PSD) (§ 165) and New Source Review (NSR) (§§ 172 and 173) requirements. In addition, under § 110(a)(2)(c), State and local agencies are required to include in their State Implementation Plans preconstruction review programs necessary to assure that construction of any new or modified source is consistent with attainment of the National Ambient Air Quality Standards. To fulfill this requirement, most District rules require that any person building any article, machine, or contrivance which may cause the issuance of air contaminants shall obtain authorization for such construction prior to beginning actual construction.

Preconstruction review is a necessary precursor to engineering and public review processes. As a result of this process, the permitting authority may require installation of air pollution control or monitoring equipment that was not initially provided for in the design process. Thus, the pre-construction review process is mandated both to ensure that Clean Air Act requirements are met and to help sources avoid costly construction changes.

The question of what type of preliminary site activities may be conducted prior to permit issuance was addressed by EPA policy memoranda. on December 18, 1979, March 28, 1986 and May 13, 1993. These memoranda explain that certain limited activities that do not represent an irrevocable commitment to the project would be allowed, such as planning, ordering of equipment and materials, site clearing, grading, and on-site temporary storage of equipment and materials. Any of these activities, if undertaken prior to issuance of a permit, would be at the risk of the owner or operator.

In contrast, all on-site activities of a permanent nature aimed at completing construction or of the source including but not limited to installation of building supports and foundations, paving. laying of underground pipe work, construction of any permanent storage structure, and activities of a similar nature are prohibited until after the permit is issued and effective, under all circumstances.

In addition, EPA has long maintained that in order to meet legal requirements, permits to construct must require enforceable emission limitations. Limiting the potential to emit of a stationary source is of primary importance in establishing whether a new or modified source is major and thus subject to PSD or NSR requirements. For any limit or condition to be a legitimate restriction on potential to emit, that limit or condition must be federally enforceable. Such conditions and limitations ensure that:

- a source that has the potential to emit in amounts that would constitute a major source or major is restricted from doing so in a manner that is federally enforceable;
- all contemporaneous emissions increases and decreases am creditable and federally-enforceable; and
- where appropriate, emissions offsets transactions are documented clearly and offsets are real, creditable, quantifiable, permanent, and federally-enforceable.

We are committed to working with you to ensure that sources participate in the preconstruction review process and obtain permits with federally enforceable emission limitations prior to beginning actual construction (as defined at 40 CFR 51.165 (a)(l)(xv), 51.166 (b)(11), and 52.21 (b)(11)). If you have any questions or would like copies of the memoranda mentioned above, please contact Jennifer Fox of my staff at 415-744-1257.

Addressees:
All Region IX Air Agency Directors
All Region IX New Source Review Contacts

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460 OFFICE OF AIR AND RADIATION

MEMORANANDUM

SUBJECT: Construction Activities at Georgia Pacific

FROM: John B. Rasnic, Director Stationary Source Compliance Office of Air Quality Planning and Standards

TO: Bernard E. Turlinski,
Chief Air Enforcement Branch
Region III

This is in response to your memorandum dated April 27, 1993, requesting a written opinion about the applicability of the Prevention of Significant Deterioration (PSD) regulations to certain Georgia-Pacific activities at a site in West Virginia. We also have a copy of the inquiry dated march 29, 1993 to you from Georgia-Pacific. As discussed below, this office concludes that the activities as described by Georgia-Pacific in its letter are construction activities prohibited prior to the issuance of a PSD permit.

Section 165(a) of the Clean Air Act states that u[nlo major emitting facility ... may be constructed ... unless - (1) a permit has been issued... [and various other requirements satisfied]." Section 52.21(i)(1) specifies that a source may not begin actual construction until the source obtains a PSD permit. The regulations and several memoranda specifically state that "begin actual construction means initiation of physical on-site construction activities ... which are of a permanent nature." A memorandum dated December 18, 1978 from Edward Reich, Director of the Stationary Source Compliance Division, "Interpretation of "Constructed" as it applies to Activities Undertaken Prior to Issuance of a PSD Permit," specifically states that all on-site activities of a permanent nature aimed at completing a PSD source for which a permit has yet to be obtained are prohibited under all circumstances. A memorandum dated March 28, 1986 from Edward Reich, to Robert DeSpain of Region VIII, "Construction Activities Prior to Issuance of a PSD Permit with Respect to "Begin Actual Construction," clarifies such prohibited activities to include any emissions unit or installation necessary to accommodate the PSD source. If the construction activity is an integral part of the 2 PSD source or modification, the source must obtain a PSD permit. In other words, if the construction prior to such construction would not serve in accordance with its original. intent except for inclusion of the emissions unit, such construction is prohibited prior to obtaining a PSD permit.

In a memorandum dated October 10, 1978 from Edward Reich to Thomas Devine of Region I, "Source Construction Prior to Issuance of a PSD Permit," EPA referred to equity arguments in addition to the statutory and regulatory basis for prohibiting construction on a source prior to issuance of a PSD permit. Any activities undertaken prior to the issuance of a PSD permit, although solely at the owner's or operator's risk, should minimize or avoid any equity arguments at a later time that the permit should be

issued. The memorandum stated that the permitting authority would be placed in a very difficult position when denying issuance of a permit when it results in a completed portion of a project having to remain idle. Therefore, activities of a permanent nature that also contribute to such equity arguments (such as they are an integral part of the PSD source, activities that are very costly or would result in significant irrevocable loss to the owner,) are prohibited construction activities prior to the issuance of a PSD permit.

In the letter to Region III, Georgia-Pacific stated that it blasted rock and removed rock and soil to create a pit 40 feet wide by 230 feet long by 35 feet deep in connection with the construction of an oriented strand board (OSB) plant. Georgia-Pacific requested to be allowed to complete what it describes as "preparatory" activities by constructing a retaining wall and backfill some of the press pit.

Your office agrees that construction of a retaining wall involves more than preparatory activities under 40 C.F.R. SS52.21(b)(11). Although the memorandum from Edward Reich dated December 18, 1978 distinguished activities of a preparatory nature from those of a permanent nature, our policy also focusses on the relation of the activity to the PSD source. Construction of a retaining wall is considered an activity under "begin actual construction" because it is of a permanent nature. The excavation is also permanent and is an integral part of the PSD source.

The PSD regulations prohibit any construction activities that are of a permanent nature related to the specific project for which a PSD permit is needed, as opposed to general construction activities not related to the emissions unit(s) in question, prior to the receipt of a construction permit. This standard prohibits activities affecting the property in a permanent way that the of constructing the regulated project. Site clearing and grading are in general relatively inexpensive and couid be used for a 3 variety of possible construction-related activities. Moreover, even if site clearing and grading were not followed by any construction, it normally would not represent a significant economic loss to the owner or change in use of the property. Accordingly, such activities generally are not considered permanent activities related to the specific project. The excavation activities in this case, on the other hand, are costly, they significantly alter the site, are an integral part of the overall construction project, and are clearly of a permanent nature. Consequently, these activities are within the meaning of "begin actual construction."

Therefore, we agree with your opinion that construction of the retaining wall is a prohibited activity. In addition, we believe that the excavation is a prohibited activity, as well. If you have any questions regarding this matter, please contact Clara Poffenberger at 703 308-8709.

Attachments

cc: Julie Domike, OE

Greg Foote, OGC
David Solomon, AQMD

Laxmi Kesari, SSCD
Charles McPhedran, ORC, Region III

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
841 Chestnut Building
Philadelphia, Pennsylvania 19107

SUBJECT: Georgia-Pacific Applicability Determination

DATE: 4-27-93

FROM: Bernard E. Turlinski, Chief
Air Enforcement Branch

TO: John B. Rasnic, Director
Stationary Source Compliance Division

On April 5, 1993, Region III received an inquiry from Georgia-Pacific Corporation about the applicability of the Prevention of Significant Deterioration regulations to certain Georgia-Pacific activities at a site in West Virginia. This memorandum requests a written opinion from your office about the applicability of the PSD regulations to these activities.

As detailed in Georgia-Pacific's letter, Georgia-Pacific has dug a pit 40 feet wide by 230 feet long by 35 feet deep in preparation for the construction of an OSB plant. Excavating this hole involved blasting and removing rock, as well as soil, and some grading and filling. Georgia-Pacific now proposes to build a retaining wall in order to backfill an additional part of the excavated area. Before proceeding, Georgia-Pacific has requested an EPA opinion about the applicability of PSD.

Based on Region III's reading of the PSD regulations and a memorandum dated March 28, 1986, this situation presents a close question regarding PSD applicability. Earlier EPA policy referenced in the March 28, 1986 memorandum indicates that site clearing and grading do not represent "beginning actual construction" for PSD purposes. However, construction of the retaining wall seems to involve more than merely preparatory activities under 40 C.F.R. § 52.21(b)(11).

Supporting materials on this question have already been forwarded to Clara Poffenberger of your office. Please provide a written applicability determination at your earliest convenience. If you have any questions regarding this matter, please contact Charles McPhedran, Assistant Regional Counsel, at (215) 597-8451.

TOTAL P.02

OCT 17-'95 11:41PM FROM EPA REGION III TOX & PES TO

Georgia-Pacific Corporation
Wood Products
Manufacturing Division
P.O. Box 105603
Atlanta, Georgia 30348
Telephone (404) 521-4000

March 29, 1993

RECEIVED
APR 05 1993
AIR ENFORCEMENT BRANCH
EPA Region III

Mr. Bernard E. Turlinski
Enforcement Branch Chief
Mail Code 3AT20
U. S. EPA, Region III
841 Chestnut Building
Philadelphia, PA 19107

Dear Mr. Turlinski:

Georgia-Pacific Corporation is working through the state of West Virginia Department of Environmental Protection in an effort to obtain a PSD permit for an OSB plant which we plan to construct within the state.

To date, we have cleared the site and completed a portion of the grading and filling work. As part of this site development work, we blasted rock and removed it, along with the other soil, from the area where the press pit will ultimately be constructed. Because of the size of the pit (approximately 40 feet wide by 230 feet long by 35 feet deep), plus the additional material that had to be removed to maintain acceptable slopes on the side walls, we have ended up with a tremendous hole.

Now, in order to complete this phase of the site work, we plan to install a retaining wall within the press pit area that will allow us to backfill that portion of the excavation that will be outside the actual press pit area. Backfill will be placed and compacted in 1 foot "lifts" up to sub-grade, plus an additional 3 to 4 feet. This "over-fill" will be used to pre-load the filled area below, and will remain in place for 3 to 6 months or until all settlement has ceased. This pre-loading will prevent settlement of the building foundations that will ultimately be placed in this filled area.

If this back filling is not completed in 1993, the whole project will be delayed by about 6 months. Based on the monitoring schedules and the anticipated time required for review of the permit application, we expect to receive our permit about the first of January, 1994. However, since the ground can freeze to a depth of 1 to 2 feet, in this part of the country, this fill work could not be done during the winter months. We would, therefore, be forced to wait until the spring of 1994 to begin. Since it will take about 1 1/2 to 2 months to do the back-filling, and an additional 3 to 6 months must be allowed for the settling to take place, the delay could easily add 6 months to the overall length of the job.

We realize that there is a possibility that the site we have selected for this plant cannot be permitted, and that we are at some risk in proceeding with the planned work. We are willing to take this risk, but we are not willing to risk a possible NOV from EPA for beginning actual construction without a permit. We have reviewed the regulations and the "guidance" covering the type of work that is allowed, prior to receiving a permit, and we do not believe that the work outlined above is in violation of the either the letter or the intent of the law. However, before we proceed, we need confirmation from your office that our interpretation is correct. Please advise.

If you have any questions, please give me a call at 404/521-5078.

Sincerely,

A. T. Johnson
Manager of Engineering
Building Products Engineering
GEORGIA-PACIFIC CORPORATION

ATJ:scp

cc: Mr. R. L. Burns
Mr. R. H. Jordan
Mr. A. F. Hodges
Mr. L. P. E. Otwell

TOTAL P.03

The purpose of this memo is to provide guidance on soi and water cleanup projects which involve 'ssions to the air.

Ohio Administrative Code rule 3745-31-02 states that "no person shall cause, permit, or allow the installation of a new source of air pollutants ... without first obtaining a permit to install from the Director." Since soil remediation projects typically involve the vaporization of a hydrocarbon into the ambient air, this type of operation would normally require a permit.

Depending on the size and/or method of the remedial project, either a permit to install (PTI) or a letter of approval will be required. If a cleanup is expected to take longer than 18 months then the person or company is required to submit a PTI application to the appropriate local or district office. The appropriate field or district office is determined according to the county the cleanup site is located (see attachment). The process of obtaining this type of PTI takes approximately 2-4 months. If the remedial project is expected to take less than 18 months and the emissions are determined to be insignificant then Ohio Administrative Code (OAC) rule 3745-31-03 (A)(2) can apply. This rule allows any air contaminant source associated with the clean up of a spill or leaking underground storage tank to be exempted from the requirement of obtaining a PTI.

In order to apply for this exemption and receive a letter of approval, the Ohio EPA requires companies to supply the appropriate field office with the following information:

1. A description of the site.

2. The location of the site.

3. The nature and type of contamination.

   A description of vapor extraction system/liquid stripping system, etc.

5. An estimate of the emission of benzene, toluene, ethylbenzene, and xylene (BTEX) in ppm by volume, lbs/hour, and tons/year. (Or other hydrocarbon emissions for non-gasoline extractions.)

6. A description and cost of the vapor control equipment (95% control is generally expected unless emissions are anticipated to be under 15 lb/day of BTEX).

   An estimate of how long the system will need to be in operation.

The Ohio EPA reserves the right to require companies to apply for air pollution permits for remediation projects.

If you have any further questions, please call the field or district office and ask for the air permitting engineer which handles the county in which the clean up site is located.

MR/mmc

DRAFT COPY
SUBJECT TO REVISION
OHIO EPA

OhioEPA
State of Ohio Environmental Protection Agency

P.O. Box 1049, 1800 WaterMark Dr.
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(614) 644-3020
FAX (614) 644-2329

George V. Voinovich
Governor

Donald R. Schregardus
Director

January, 1994

Dear Interested Party:

Ohio EPA's extensive review of the disputed issues surrounding thermal treatment of petroleum contaminated soil (PCS) is complete. I am writing to inform you that the Agency will resume review of applications for stationary units that treat PCS, subject to a number of requirements imposed in response to citizens' concerns.

Operators of stationary PCS thermal treatment facilities will be required to conduct more extensive testing of the soil they treat. All soil samples must be processed by an independent laboratory, instead of by the thermal treatment facility itself. Soil must be tested at its site of origin, and after treatment to insure adequate removal of contaminants. In addition, Ohio EPA may randomly collect samples of incoming soil.

A "manifest" system of shipping documentation will be created to track shipments of contaminated soil from their point of origin to the treatment facility. This system, similar to the one used for hazardous wastes, will help to insure that only petroleum contaminated soil is accepted for treatment.

The above controls will be more effective than background checks in ensuring that thermal treatment units operate in compliance. Ohio EPA will not seek to impose background check requirements on owners and operators of PCS treatment facilities.

Stationary facilities may be subject to additional permitting requirements under water pollution control regulations. These requirements would specify how the operator must prevent precipitation from picking up contaminants and carrying them off-site.

The Agency will impose standard conditions in permits for stationary treatment units, as we have for mobile units. While I prefer mobile treatment as a solution that deals with the problem in place, not all sites can accommodate a mobile unit. The requirements detailed above and in the attached Reponse to Comments will help to minimize the potential for negative environmental impact from stationary thermal treatment units.

I appreciate the involvement of all those who participated in discussing appropriate regulatory controls for PCS thermal treatment. Through reasoned debate and the willingness to share your time and suggestions, we have a regulatory approach that provides greater environmental protection. Ohio has 15,000 leaking underground storage tanks, and hundreds of tons of soil to treat. Left untreated, petroleum contamination can enter groundwater and threaten drinking water supplies. The controls you have helped to devise will allow safer treatment of this contaminated soil. Thank you for your efforts on behalf of Ohio's environment.

Sincerely,

Donald R. Schregardus
Director

Technology Issues

Determining the Best Available Technology (BAT) for treating petroleum contaminated soil; Alternative technologies that do not involve burning or incineration; Potential for using no technology other than evaporation

There is no single Best Available Technology that can be applied to every case of PCS. The Agency does not choose to limit one technology to remediate soil when several methods can accomplish the same result. Additionally, some of the technologies are not always an option due to site specific characteristics.

Currently, there are four treatment methods for PCS. Each of the following methods can create air emissions in addition to other environmental concerns. All treatment methods are better options than landfilling or leaving contaminated soil in the ground.

Land farming: This method involves spreading soil over an open area, allowing contaminants to be released into the air. If not properly contained, rainwater runoff could cause additional problems.

Soil vapor extraction: This method involves venting air in the soil to remove vapors which may be controlled or vented to the air. As soil is cleaned to acceptable levels, it normally remains in the ground at the original location. At some locations due to site characteristics, soil vapor extraction is not cost effective or feasible. This process also releases contaminants into the air.

Bioremediation: This method involves putting microorganisms, water and oxygen in the soil to break down contaminants. Volatile petroleum contaminants are then released into the air. If not contained, rainwater could run off or leach into the ground. Not all sites are suitable for Bioremediation.

Thermal Treatment: This method involves heating soil to 350-700 degrees Fahrenheit. It is often referred to as thermal desorption to differentiate from incineration because combustion is an aspect of incineration. There is no combustion in thermal treatment, however, contaminants are separated from the soil and released into air pollution control equipment to minimize emissions being released into the air.

Higher temperatures to ensure 99% destruction efficiency

Ninety-nine percent destruction efficiency is required for all thermal treatment soil units. Stack tests will be required for all facilities, including facilities that are currently operating. This degree of efficiency can be achieved over a range of temperatures.

Permitting Issues

Background Checks on all owners and operators of facilities handling contaminated soil

Ohio EPA is not requiring background checks on owners and operators of PCS treatment facilities. Instead, Ohio EPA has placed a significant amount of regulatory controls and check points in the remediation process to eliminate the potential for adverse impacts to health and the environment. Ohio EPA has determined that additional testing and verification by an independent laboratory, as well as a soil delivery manifest system, will be the most effective method to ensure compliance. If the agency discovers a a PCS treatment facility burning anything other than PCS, the director will take immediate steps to shut the facility down.

Comprehensive review consisting of input from Ohio EPA's air, solid waste, and water programs

Ohio EPA has conducted a comprehensive review of mobile and stationary thermal treatment units with input from the air, hazardous waste, solid waste, and water programs. The Agency has determined the Division of Air Pollution Control will be the primary division to review thermal treatment operations which will address air emissions and other operational requirements (See Sample Permit, Attachment 1). PCS storage piles will be inspected by county health departments with an approved solid waste program. If the potential exists for a wastewater or surface water discharge from a facility, the permit application will go through an additional review by the Division of Surface Water. The Division of Surface Water may require the applicant to obtain a discharge permit.

Rationale for permitting facilities that pollute the air as an answer to eliminating a potential pollution problem affecting ground water

Leaking underground storage tanks release petroleum contaminants into the soil, potentially affecting ground water. Petroleum contaminants also are released into the air if soil is left untreated. Ohio EPA views this type of unmonitored release as more threatening to the environment than a properly operated soil treatment facility. Ohio EPA encourages alternative technologies for treating PCS as opposed to landfilling.

Permitting portable facilities as opposed to stationary

Not all sites can physically accommodate a mobile PCS treatment unit. Ohio EPA has determined that both stationary and portable units are viable alternatives in remediating PCS.

Authority of Solid Waste Districts to regulate, monitor and oversee

Permitting, inspections, complaints and facility compliance will fall within Ohio EPA jurisdiction. The State Fire Marshal's Office Bureau of Underground Storage Tank Regulation (BUSTR) can now grant permission for soil from a BUSTR site to be moved to a portable treatment unit. County health departments that have an approved solid waste program also will assist Ohio EPA in inspecting PCS storage piles. Ohio EPA has determined that this degree of oversight will be more than adequate to ensure protection of public health and the environment.

Variation in allowable temperatures in the rotary drum from permit to permit; Standardization of permits

Thermal treatment units are designed to operate effectively over a range of temperatures. Operating temperature and other factors such as air flow rate, soil processing rate and contamination levels are taken into consideration in calculating potential emissions from the treatment unit. All of these areas are reviewed by Ohio EPA to determine if the proposal is acceptable and meets BAT. It is possible for two separate applications with varying technologies to both meet BAT and have different operating temperatures. All thermal treatment units will be required to achieve 99% destruction efficiency. Other aspects of the permit (i.e. terms and conditions, emission limits, and facility design) will also be standardized. (See Attachment 1)

Permission for these types of facilities to burn contaminants other than what is contained in PCS, such as hazardous waste

Ohio EPA will not permit PCS thermal treatment units to burn hazardous waste.

Determining what the public wants included in the permit before issuing a draft permit

Ohio EPA has spent one year gathering input from both citizens and the regulated community on PCS thermal treatment facilities. When Ohio EPA receives a permit application for a stationary unit, the Agency will send out a news release acknowledging receipt of the application(s). Ohio EPA will place a copy of that application in the library closest to the proposed location and will consider any written comments prior to issuance of a draft.

Allowing a new owner to pick up the application process where the previous applicant left off

Section 3704.03 part F of the Ohio Revised Code states that air permits-to-install (PTI) are transferable. When this situation occurs, the new applicant must re-submit all changes resulting from the transfer. If the technology and proposed site remains the same, the new applicant may pick up where the previous applicant left off. It is not a wise use of the Agency's resources to repeat the review process if the only change is the name on the application.

Capacity Issues

Documentation that these types of facilities are actually needed

BUSTR's records indicate there are over 15,000 leaking underground storage tank sites averaging about three tanks per site, and 30-50 cubic yards of soil per site. PCS treatment facilities will also take PCS from rail yards, feed lots and other industrial sites where gasoline has contaminated the soil.

Number of Soil burners and their location

(See Attachment 2)

Testing and inspection issues

Self-policing nature of, monitoring and reporting

Self-monitoring, record-keeping and reporting provide much more extensive information on compliance than can be obtained from periodic inspections. Self-monitoring and record-keeping also shift some of the economic responsibility from Ohio EPA to the regulated community. It also provides a mechanism for educating the regulated community about compliance requirements. This self-policing nature that facilities are required to employ has increased the level of attention devoted to environmental compliance. As a result, some companies have begun to improve production efficiency and implement pollution prevention strategies.

In addition, soil testing will be performed by independent laboratories. Performance testing is witnessed and reviewed by Ohio EPA. Regular inspections will also be conducted by Ohio EPA.

Additional random soil testing conducted by Ohio EPA

Ohio EPA plans to conduct random soil sampling to ensure the facility is not taking anything other than PCS.

Ensuring companies are not falsifying information regarding soil contents

Ohio EPA will require the use of strict testing protocol to assure PCS treatment units receive only PCS. Ohio EPA is requiring soil to be tested prior to entrance to the facility and after remediation to ensure safe processing of PCS. All tests must be verified by an independent laboratory. Facilities must also keep track of the paperwork verifying origin and sampling results of the soil. A delivery manifest identifying the soil must arrive with each load. These documents will be checked by Ohio EPA during inspections. Ohio EPA may also conduct a random soil sampling to ensure companies are not falsifying information.

Adequacy of Ohio EPA enforcement

Ohio EPA's Special Investigations Section works in conjunction with the Attorney General's Office (AGO) Bureau of Criminal Investigation to document criminal violations of Ohio's environmental laws. In 1992, Ohio EPA collected over $8 million in penalties resulting from environmental violations. If violators refuse to enter into a consent decree or if the actions constitute a flagrant violation, Ohio EPA refers these offenders to the AGO. The AGO's environmental enforcement section is one of the largest in the country. Ohio is regarded as a national leader in seeking criminal prosecutions against environmental violators.

Testing of every load of PCS to be burned

Before accepting soil for treatment, the origin of the soil and the results of testing conducted during the site cleanup are verified. This ensures that the soil is non-hazardous PCS and that the contamination levels of the soil do not exceed permit limits. The facility may then proceed with the remediation process. All soil sample results must be certified by an independent laboratory.

More frequent stack testing

Stack tests are done during the initial permitting of a facility and may be conducted upon the renewal of a permit-to-operate (PTO). These tests are conducted under worst case conditions, and the units operating parameters are measured, along with emissions testing, to determine compliance with air permit limits. After the initial parameters are set, Ohio EPA can also determine whether the facility is operating within those parameters by reviewing operational records and monitoring equipment.

If Ohio EPA determines at any given time that a facility's operational parameters need to be reassessed, Ohio EPA may request that the facility conduct additional stack tests.

Scope of inspections beyond file reviews

A typical Ohio EPA inspection of a PCS treatment facility includes checking the facility's entire operations in accordance with the terms and conditions of the permit. These inspections may be announced or unannounced by Ohio EPA. During these inspections, Ohio EPA evaluates the facility's methods for soil sampling and verification. The inspector also looks at how the soil is stored and handled to ensure there are no fugitive emissions. Air monitoring and temperature devices are also checked to ensure emission limits are being met. Additionally, random soil sampling may be conducted.

Public Involvement Issues

Proactive participation with local public; Mechanism for complete disclosure of a company; Notification of local health departments and local media upon receipt of an application; Evaluation period upon receipt of an application; Lack of local environmental advisory boards

Ohio EPA places high priority on public participation and recognizes the significant level of interest in PCS treatment facilities. Upon receipt of an application for a stationary PCS facility, the Agency will notify media, legislators, local elected officials, environmental groups and the local and county health departments to acknowledge receipt of the application. Ohio EPA will also place a copy of that application in the local library closest to the proposed location. Ohio EPA will consider any written comments prior to issuance of a draft. If requested, the Agency will hold a public information session and/or hearing to answer questions and accept comments. Ohio EPA believes advisory groups provide a positive mechanism for exchange of information and ideas for all types of facilities. Typically, local officials or environmental groups coordinate this type of panel and Ohio EPA serves as a group member.

Siting Issues

Proximity to residences, schools and rivers; Location over aquifers or in a flood plain

Ohio EPA will not permit a facility to operate in a flood plain.

Other siting issues regarding proximity to residences and schools should be addressed through local zoning. During the permit review process, Ohio EPA determines whether the proposed source complies with the National Ambient Air Quality Standards and Ohio's Air Toxics Policy. These standards are set to be protective of public health no matter what type of development is in the area.

Public Health Issues

Effects of lead from these facilities on children

PCS from leaking underground storage tanks typically do not contain high levels of lead. Actually, higher levels of lead have been found in farm soils than found in PCS. However, when required for non-BUSTR sites, PCS is tested for lead before it is accepted at a facility to be remediated. If the levels found in PCS exceed 50 parts per million, it is considered a hazardous waste and will be sent off-site to be treated and disposed.

Facilities impact on public health

Ohio EPA has determined properly constructed and operated PCS treatment facilities do not pose a significant risk to public health and the environment, however, the Agency has added additional requirements to reduce any potential threats that may occur.

Flammability and Volatility of PCS fumes

The petroleum content in PCS is rarely sufficient to make it flammable or volatile.

Surface Water runoff from PCS piles

The Agency will require stationary PCS storage and treatment areas to be housed. Also, PCS must be stored on a concrete or impervious surface to protect against ground water contamination. If there is a potential for wastewater discharge, or surface water runoff, the facility is required to apply and obtain an appropriate discharge permit in accordance with Ohio Revised Code chapter 6111. (See Attachment 3)

Prevention of contamination of soil with petroleum products

See Attachment 4, BUSTR's fact sheet

Disposal of the residues from the burning process

The residue from the PCS treatment process is essentially clean soil. This residue, like the soil, will have to be tested prior to reuse.

Out of state waste

(See Attachment 5)

Funding for health departments to provide additional oversight

County health departments with approved solid waste programs currently provide additional oversight by inspecting the handling and storage of PCS.

DRAFT
STATIONARY THERMAL UNITS

TERMINATION OF PERMIT TO INSTALL

Substantial construction for installation must take place within 18 months of the effective date of this permit. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.

NOTICE OF INSPECTION

The Director of the Ohio Environmental Protection Agency, or his authorized representatives, may enter upon the premises of the above-named applicant during construction and operation at any reasonable time for the purpose of making inspections, conducting tests, or to examine records or reports pertaining to the construction, modification or installation of the source(s) of environmental pollutants identified within this permit.

CONSTRUCTION OF NEW SOURCES(S)

The proposed source(s) shall be constructed in strict accordance with the plans and application submitted for this permit to the Director of the Ohio Environmental Protection Agency. There may be no deviation from the approved plans without the express, written approval of the Agency. Any deviations from the approved plans or the above conditions may lead to such sanctions and penalties as provided under Ohio law. Approval of these plans does not constitute an assurance that the proposed facilities will operate in compliance with all Ohio laws and regulations. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed sources are inadequate or cannot meet applicable standards.

If the construction of the proposed source(s) has already begun or has been completed prior to the date the Director of the Environmental Protection Agency approves the permit application and plans, the approval does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the approved plans. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of Ohio Administrative Code (OAC) Rule 3745-31-02. Furthermore, issuance of the Permit to Install does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Approval of the plans in any case is not to be construed as an approval of the facility as constructed and/or completed. Moreover, issuance of the

Permit to Install is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities prove to be inadequate or cannot meet applicable standards.

PERMIT TO INSTALL FEE

In accordance with Ohio Revised Code 3745.11, the specified Permit to Install fee must be remitted within 15 days of the effective date of this permit to install.

PUBLIC DISCLOSURE

The facility is hereby notified that this permit, and all agency records concerning the operation of this permitted source, are subject to public disclosure in accordance with OAC Rule 3745-49-03.

APPLICABILITY

This Permit to Install is applicable only to the contaminant sources identified. Separate application must be made to the Director for the installation or modification of any other contaminant sources.

BEST AVAILABLE TECHNOLOGY

As specified in OAC Rule 3745-31-05, all new sources must employ Best Available Technology (BAT). Compliance with the terms and conditions of this permit will fulfill this requirement.

PERMIT TO OPERATE APPLICATION

A Permit to Operate application and a $15 application fee must be submitted to the appropriate field office for each air contaminant source in this Permit to Install. In accordance with OAC Rule 3745-35-02, the application shall be made at least 90 days prior to start-up of the source.

NINETY DAY OPERATING PERIOD

The facility will be permitted to operate during a 90-day period in accordance with OAC Rule 3745-35-02(C)(4)(b). The purpose of this

period of operation is to fulfull the performance tests conditions used in the determination of compliance with the provisions of this Permit to Install or other applicable Ohio EPA rules.

SOURCE OPERATION AFTER COMPLETION OF CONSTRUCTION

This facility is permitted to operate each source described by this permit to install for a period of up to one year from the date the source commenced operation. This permission to operate is granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws, regulations, and policies.

AIR EMISSION SUMMARY

The air contaminant sources listed below comprise the Permit to Install for _____ located in _____ County. The sources listed below shall not exceed the emission limits/control requirements contained in the table. This condition in no way limits the applicability of any other state or federal regulations. Additionally, this condition does not limit the applicability of additional special terms and conditions of this permit.

Ohio EPA Source Number	Source Identification Description	BAT Determination	Applicable Federal & OAC Rules	Permit Allowable Mass Emissions and/or Control/Usage Requirements
P001	_____ton/hour Soil Remediation/ Recycle Plant	*	3745-31-05 3745-15-07 3745-17-07 3745-17-11 3745-21-07	**
P002	Soil Storage Building	See additional terms and conditions	3745-31-05 3745-15-07 3745-17-08	lbs/hr VOC lbs/hr PM
F001	Roadways and Parking Areas	See additional terms and conditions	3745-31-05 3745-15-07 3745-17-08	lbs/hr PM

*Use a fabric filter to control particulate emission (control efficiency no less than 99.0%) and an afterburner to destruct organic compound emission (destruction efficiency no less than 99.0%).

**Minimum particulate emission control efficiency: 99.0% and

maximum particulate emission 0.04 grain/dscf or ____ lb/hr. Minimum organic compound destruction efficiency: 99.0% and maximum organic compound emission __lb/hr. No objectionable odor. No greater than 5 percent opacity. Maximum _____ lb NO_x/hr, ____ lb CO/hr, _____ lb SO_2/hr, and ___ lb lead/hr.

SUMMARY

TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

Pollutant	Tons/Year
PM	
OC	
NO_x	
SO_2	
CO	
Lead	

RECORD(S) RETENTION AND AVAILABILITY

All records required by this Permit to Install shall be retained on file for a period of not less than two years unless otherwise indicated by Ohio Environmental Protection Agency. All records shall be made available to the Director, or any representative of the Director, for review during normal business hours.

MAINTENANCE OF EQUIPMENT

This source and its associated air pollution control system(s) shall be maintained regularly in accordance with good engineering practices and the recommendations of the respective manufacturers in order to minimize air contaminant emissions.

MALFUNCTION/ABATEMENT

In accordance with OAC RULE 3745-15-06, any malfunction of the source(s) or associated air pollution control system(s) shall be reported immediately to the Cleveland Air Pollution Control, 1925 St. Clair, Cleveland, Ohio 44114.

Except as provided by OAC Rule 3745-15-06(A)(3), scheduled maintenance of air pollution control equipment that requires the shutdown or bypassing of air pollution control system(s) must be accompanied by the shutdown of the associated air pollution sources.

AIR POLLUTION NUISANCES PROHIBITED

The air contaminant source(s) identified in this permit may not cause a public nuisance in violation of OAC Rule 3745-15-07.

CONSTRUCTION COMPLIANCE CERTIFICATION

The applicant shall provide Ohio EPA with a written certification (see enclosed form) that the facility has constructed in accordance with the Permit to Install application and the terms and conditions of the Permit to Install. The certification shall be provided to Ohio EPA upon completion of construction but prior to startup of the source.

~~ADDITIONAL SPECIAL TERMS AND CONDITIONS~~

Materials Acceptable for Treatment

1. The purpose of this permit is to allow the treatment of soils contaminated with hydrocarbons, provided they are not hazardous materials subject to RCRA requirements.

   Only soils and aggregate contaminated with virgin (nonrecycled) petroleum products shall be treated in the process, which includes only:

   a. No. 1 fuel oil
   b. No. 2 fuel oil
   c. No. 4 fuel oil
   d. No. 6 fuel oil
   e. gasoline
   f. jet fuel
   g. diesel fuel
   h. airplane fuel
   i. kerosene

   Soils contaminated with any other petroleum type products or fuels will require either Ohio EPA evaluation and approval or a permit to install.

Operating Requirements and Allowable Emissions

1. The primary treatment unit (volatilizer) shall be operated at a minimum temperature of ____ degrees Fahrenheit*.
   *depends upon design type of the unit; as stack tested

2. Particulate matter emissions from the stack shall not exceed 0.04 grain/dscf or ____ pounds per hour*. Opacity of visible emissions coming from the stack shall be limited to 5 percent maximum.
   *will vary in permits due to specific treatment unit

3. This facility shall continuously monitor and record the temperature of the exhaust from both the volatilizer and the

thermal oxidizer serving this source. The temperature records shall be retained in this facility's files for a period of not less than three years and shall be made available to the Director or any authorized representative of the Director during normal business hours.

An outlet temperature of not less than ___* degrees Fahrenheit shall be maintained for the exhaust gases from the thermal oxidizer. The primary treatment unit shall not be operated unless the baghouse and the afterburner are fully functional and the afterburner is at a temperature of ____ degrees Fahrenheit.
*will vary depending upon the unit (minimum of 1450 degrees)

4. All emissions from the volatilizer must pass through the fabric filter then the thermal oxidizer and remain in the oxidizer chamber for a minimum of one (1) second (at a minimum temperature of ____ degrees Fahrenheit) before exiting the chamber.

5. **The oxidizer shall have an organic compound destruction efficiency of 99.0% at worst case conditions. The maximum emissions from the source shall not exceed . _ pounds per hour* of organic compounds.**
***will vary in permits due to specific treatment unit**

6. **The throughput of the contaminated soil shall not exceed tons per day*.**
***depends upon unit and amount applied for**

7. **The organic compound concentration of the contaminated soil shall not exceed _____ percent by weight of contaminated soil or _____ ppb*.**
***depends upon application and allowable emissions amounts**

8. Either propane or natural gas may be used as fuel in the volatilizer and the thermal oxidizer. If the facility wants to use other types of fuel rather than the ones specified hereto, a new permit to install will be required.

9. This facility shall have calibrated scales capable of weighing the amount of soil charged to the volatilizer on an hourly basis.

Soil Sampling, Testing and Documentation

1. Sampling at the generating site, before receipt of soil.

BUSTR Site Requirements

When remediating petroleum contaminated soil from a site which is regulated by the State Fire Marshal - Bureau of Underground

Storage Tank Regulation (BUSTR), this facility shall ensure that soil sampling is performed and the result obtained before accepting or remediating the soil. A representative sample(s) shall be analyzed and the results certified by an independent laboratory for organic compounds. Sampling and analysis shall be conducted in accordance with BUSTR's Soil Policy and requirements. BUSTR required site sampling shall fulfill this requirement.

Non-BUSTR Site Requirements

When remediating contaminated soil that does not originate at a site regulated by BUSTR, this facility shall:

a. require that sampling of the soil from the contaminated site be performed, either by this permit holder or by the generator of the soil, before accepting or remediating the soil. A representative sample(s) shall be analyzed and the results certified by an independent laboratory for organic compounds, and any heavy metal, halogenated organic compound or hazardous waste constituents above normal soil background levels, before it is received on site. Sampling and analysis shall be in accordance with BUSTR's Policy for organic compounds and Ohio EPA and/or USEPA policy or requirements for the other contaminants.

b. either certify and demonstrate the following, or require that the material generator certify and provide documenation which demonstrates that the soil:

   i. does not contain a listed Hazardous Waste;
   ii. is not hazardous by characteristic as defined by Ohio EPA or USEPA; and
   iii. is not regulated under TSCA.

   This certification must be in writing and must include a statement that, to the best of their knowledge, the soil conforms to this criteria.

The facility shall possess a copy of the laboratory analysis and certification (if required above) for each shipment received, and maintain it on file and readily accessable to any Ohio EPA or BUSTR representative for a period of three years.

2. Sampling upon receipt of soil

This facility shall obtain a composite sample of the soil from each separate contaminated site upon arrival. The composite sample shall consist of, at a minimum, three combined sub-samples collected from the incomming loads. The sample shall be held for a period of six months, and be available for

analysis if required by Ohio EPA.

3. Sampling of remediated soil.

This facility shall obtain daily composite samples of the soil after being remediated. The composite samples shall be analyzed and certified by an independent laboratory. The results shall include testing for benzene, toluene, ethylbenzene, xylene, and organic compounds, in accordance with the Ohio EPA PCS Policy (PP 01 03 200).

If the soil contamination level is above the levels in the Ohio EPA PCS Policy, the soil would be regulated as solid waste and should be treated or disposed of in accordance with the Ohio EPA Solid Waste regulations. If the soil contamination level meets the PCS Policy criteria, the soil may be managed as a non-regulated material.

4. Delivery Manifest (or Bill of Ladding) Certification.

The soil generator must certify to the driver of the delivery vehicle, on the manifest, that the material is non-hazardous as defined by Ohio EPA or USEPA. The driver must certify on the manifest upon delivery, that this material was received from the generator and that it is unchanged from the time of receipt. If the soil is at any time owned or possessed by any intermediate party, they must certify in writing (on the manifest or a certification document) that the soil remains unchanged from initial receipt.

5. The delivery manifest, soil certification and documentation shall be verified before unloading.

6. Records must be kept that include copies of the following:

a. soil analysis results;
b. the delivery manifest;
c. soil certification and documentation (if required).

These records must be maintained for a period of not less than three years and shall be made available to any authorized Ohio EPA representative during normal business hours.

The Quarterly Report required below under Recordkeeping and Reporting, number 3, shall include a statement as to whether these records are being maintained.

<u>Performance Testing</u>

1. The permittee shall conduct, or have conducted, performance testing on the air contaminant source within 90 days of start up in accordance with procedures approved by the Ohio

Environmental Protection Agency. Two copies of the written reports describing the test procedures followed and the results of such tests shall be submitted and signed by the person responsible for the test. The Director, or his authorized representative, of the Ohio Environmental Protection Agency shall be allowed to witness the tests, examine testing equipment, and require the acquisition or submission of data and information necessary to assure that the source operation and testing procedures provide a valid characterization of the emissions from the source and/or the performance of the control equipment.

a. A completed Intent to Test form shall be submitted to _____(field office with jurisdiction). This notice shall be submitted ten days before the scheduled performance test date.

b. Two copies of the test results shall be submitted within 30 days after the completion of the performance test to _____.

c. Tests shall be performed for the following source(s) and pollutant(s):

Source	Pollutant(s)
P001	OC, PM and Pb

A test shall be conducted to determine the overall destruction efficiency of the thermal oxidizer based on simultaneous measurements of inlet and outlet concentrations of organic material as determined by U.S. EPA method 25.

Tests for both the uncontrolled and controlled emissions of particulate will be conducted.

During testing the company shall record the following process parameters:

soil feed rate;
volatilizer rotary velocity;
volatilizer temperatures (inlet/outlet);
gas flow rate;
baghouse pressure drop;
thermal oxidizer temperature;
stack exit temperature;
gas velocity; and
moisture content.

Fugitive Dust and Housekeeping

1. Fugitive Dust from the process.

Fugitive dust from this process shall be controlled by use of covered conveyors and wet suppression at drop points into and out of the process. Visible emissions from the conveying and handling of soil shall not exceed ten percent opacity as a three minute average.

All soil transferred to the any elevated storage bins shall contain sufficient moisture so as to minimize or eliminate visible emissions of fugitive dust. During the loading of the soil conveyor, if one is utilized, the drop height of the front-end loader shall be minimized in order to minimize or eliminate the visible emissions of fugitive dust.

The area beneath and around the processing unit shall be kept clean from either contaminated or processed material as much as possible.

2. Contaminated Soil Storage

In order to control runoff, potential odors, fugitive dust and VOC emissions, a permanent structure or enclosure shall be used to contain the contaminated soil. This structure shall be completely enclosed. The inside air shall be sufficiently vented to a 99 percent efficient VOC control device or exhausted to the remediation unit control device. There shall be no other vents or openings to the outside air, except for soil entry and exit points and necessary doors, which shall be designed to minimize fugitive VOC's and kept closed when not in use.

3. Clean Soil Storage

A permanent structure shall be used to store clean remediated soil if possible. In lieu of a permanent structure, soil may be stored in a material storage pile, provided that appropriate fugitive dust control measures are employed and deamed acceptable to Ohio EPA upon inspection. There shall be no visible particulate emissions from the material storage pile except for a period of time not to exceed one minute during any sixty-minute observation period.

All soil storage piles shall contain sufficient moisture so as to minimize or eliminate visible emissions caused by wind erosion.

During the unloading onto or removal from the soil storage piles, the drop height of the front-end loader shall be minimized in order to minimize or eliminate visible emissions

of fugitive dust

4. Roadways and Parking Areas.

There shall be no visible particulate emissions except for a period of time not to exceed one minute during any sixty minute observation period from the paved areas. There shall be no visible particulate emissions except for a period of time not to exceed three minutes during any sixty minute observation period, for the unpaved areas.

The roadways and parking areas shall be treated with water or any other dust suppressant in order to minimize or eliminate at all times visible emissions of fugitive dust generated by vehicular traffic. Frequency of application shall be as needed. This term and conditions shall be waived during wet conditions when there is sufficient moisture to prevent visible emissions of fugitive dust.

Any material carried off of the source owner's property and deposited onto the city streets by the vehicular traffic or by erosion by water, etc., shall be promptly removed and deposed of properly in such manner so as to minimize or prevent resuspension.

A maximum speed limit of fifteen (15) miles per hour shall be posted and enforced on the property.

Open bodied vehicles transporting materials likely to be come airborne shall be covered at all times.

5. Runoff of Water.

Discharge or runoff of contaminated water from this facility shall not occur, unless specifically allowed by this permit or by another Ohio EPA or federal permit, when one is required.

Recordkeeping and Reporting

1. This facility shall submit reports which provide the following information for each period during which the thermal oxidizer exhaust gas temperatures fall below ____ degrees Fahrenheit:

   a. the date of the excursion;
   b. the time interval over which the excursion occurred;
   c. the temperature values during the excursion;
   d. the cause(s) for the excursion; and
   e. the corrective action which has been or will be taken to prevent similar excursions in the future.

   The reports shall be submitted to _____ (field office).

2. Daily records shall be kept for:

   a. total hours of operation;
   b. total fuel consumed;
   c. weight of the contaminated soil charged to the rotary volatilizer, on an hourly and daily basis;
   d. the total organic compound concentration of the contaminated soil in weight percent;
   e. temperature of the volatilizer and afterburner.

   These records shall be retained in this facility's files for a period of not less than three years and shall be made available to the Director or any authorized representative of the Director of the Ohio Environmental Protection Agency during normal business hours.

3. Quarterly reports, by calendar quarter, shall be submitted to _____(field office), by no later than the end of the month following the quarters end, which summarize the following:

   a. the above daily records;
   b. the results of any samples from sites analyzed for heavy metals, halogenated organic compounds, or hazardous waste;
   c. the total number of soil analysis results on file for each type of sample required during the period.

Ohio EPA
Division of Air Pollution Control

inter-office communication

to:	Distribution via e-mail (DO/Iaa Supervisors)
from:	Mike Hopkins and Mike Ahern, DAPC Central Office
subject:	Changed/Expanded Guidance for Synthetic Minor Permits To Install using the new PTI Format
date:	April 7, 1999

Questions were raised during the recent PTI training on how/what format Synthetic Minor Permits should be processed. At the time of the training we thought the Synthetic Minor PTIs should be in the Title V format. However, after hearing some of the questions, and considering the matter further, we have concluded that, the only time a Title V format PTI will be used is when either the current/future status of the facility will be/remain subject to Title V (even after the Synthetic Minor PTI is issued) or a new facility will be subject to Title V (even after the Synthetic Minor PTI is issued).

In deciding which format to use ask yourself the following two questions:

1) What will be the potential to emit status of the facility for each regulated pollutant once the PTI is issued?

2) Does the PTE exceed any of the major source thresholds pursuant to the Title V requirements (as identified in OAC Chapter 3745-77 and identified by example in Engineering Guide 61)?

If you answer yes to question 2, use the Title V format PTI template.

NOTE FOR MODIFICATIONS: If you are processing a PTI modification (either administrative or pursuant to OAC Chapter 3745-31) for an emissions unit located at a Title V facility, you do not need to change the structure of the permit to fit the Title V format. You may choose to keep the structure in the "old" format if you wish or you may decide to change the format to the Title V structure.

We hope this change/expansion in guidance does not cause undue hardship. This guidance is being sent via e-mail in order to expedite dissemination of this information. Please pass this guidance on to anyone who you feel may benefit from it.

Ohio EPA
Division of Air Pollution Control

inter-office communication

to: LAA Directors, DO Air Unit Suprvs., DAPC Sec. Mgrs

from: Tom Rigo

subject: Synthetic Minor Permit Guidance Document

date: November 30, 1994

Please find attached a copy of the recent guidance document that has been prepared for distribution. Please make copies of this document for your permit staff and have them available for distribution if requested from the regulated community. A copy of this document is also on the DAPC BBS. Further, we have extended the date to 12/30/94 (received by this date) for a complete synthetic minor permit application, if the entity does not want to file a 1994 fee emission report (due by 4/15/95).

I would like to thank Jim Braun for his valuable assistance with the development of this guidance document.

Please give me a call at 4-3626 should you have any questions or comments.

cc: Jim Braun, DAPC
Jeanne Mallett, Legal
Bob Hodanbosi, DAPC
Permit Advisory Group
PAG Drafting Committee

OhioEPA
State of Ohio Environmental Protection Agency

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(614) 644-3020
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George V. Voinovich
Governor

Donald R. Schregardus
Director

November 30,1994

RE: Limiting Potential to Emit to Avoid Title V Permitting Guidance Document

To Whom It May Concern:

The purpose of this document is to notify your company that there are options that may be available to your facility to avoid being subject to the Title V Operating Permit program. Title V applicability is based on a facility's potential to emit - assuming each emission unit at the facility operates 24 hours per day and 365 days per year at their maximum operating conditions. It is acknowledged that actual operating conditions are typically less than the maximum potential conditions. Consequently, U.S. EPA has provided an avenue to obtain **federally enforceable** permit conditions which restrict a facility's potential to emit below Title V applicability levels. This practice has commonly been referred to in the State of Ohio as a Synthetic Minor permit (obtained through the Permit to Install process - for new sources used to avoid federal major source new source review permitting requirements).

Currently, the only way an existing facility can obtain federally enforceable permit conditions (if not previously obtained) is through the allowance in Ohio Administrative Code (OAC) Rule 3745-31-02(A)(2). This allowance provides an existing facility the opportunity to apply for a Permit to Install to voluntarily limit the allowable air contaminant emissions from the source.

However, Ohio EPA is anticipating that we will have final approval from U.S. EPA on December 27, 1994 to issue Federally Enforceable State Operating Permits (FESOP's) in accordance with OAC Rule 3745-35-07 (attached). USEPA published their intent to approve Ohio's program in the 10/25/94 *Federal Register*. Unless adverse comments are submitted to USEPA, Ohio's FESOP program will be final on 12/27/94. Ohio EPA is recommending that existing facilities utilize the FESOP's program to obtain certain federally enforceable permit conditions to avoid Title V. You need to submit these permit applications to us as soon as possible. Even though we can not officially issue the draft permit until December 27, 1994, Ohio EPA staff can review and have those permits ready for issuance.

This letter serves to stress the importance of evaluating air emissions generated by your facility (based on the potential to emit) in connection with your existing permits. The Title V

applicability thresholds (potential to emit) for the hazardous air pollutants (HAP's) is 10 tons per year (tpy) for any single HAP and 25 tpy for any combination of HAP's. For any regulated air pollutant as defined in OAC rule 3745-77-01 [e.g. volatile organic compounds (VOC), nitric oxides (NO_x), sulfur dioxide (SO_2), particulate matter (PM), carbon monoxide (CO), etc.], the Title V applicability threshold (potential to emit) is 100 tpy.

If your facility has the potential to emit one or more of the pollutants noted above which exceed the Title V applicability thresholds, then your facility will either have to apply for a Title V permit or (if possible and desired) apply for an Ohio EPA permit to operate or Ohio EPA permit to install (if a new source) to obtain federally enforceable permit conditions to restrict your potential to emit to below the Title V major threshold. It is also possible utilizing Findings and Orders to establish federally enforceable conditions.

Since the first deadline for Title V application submittal will likely occur by mid-1995, it is recommended that you submit your application to restrict your potential to emit as soon as possible - it will take at least several months to process the application (synthetic minor applications will be given top priority in OEPA's review process).

One of the main requirements to insure federal enforceability is that the permit <u>must</u> be issued as a draft permit to allow for a thirty day public comment period (this also provides time for U.S. EPA to have the opportunity to comment) before we can issue the permit as a final action.

In order to obtain a permit which will restrict your potential to emit your company must submit the following:

1. A cover letter requesting the voluntary restriction of your potential to emit through the establishment of federally enforceable permit conditions.

2. The appropriate applications will need to be submitted for each emission unit which requires federally enforceable permit conditions. This paperwork is the same as if you were applying for a permit. An application form can be obtained from your district office (DO) or local air agency (LAA) representative.

3. Submit a potential to emit analysis that includes calculations which accurately identify the potential to emit of your facility for the pollutant(s) of concern. Also, describe in this analysis your suggested restrictions that proves that your facility would not be required to submit a

Title V application. See the example potential to emit analysis provided. Be sure to include in your calculations how all of the proposed restricted emission units and non-restricted emission units potential to emit were derived. Provide the method of emission estimation used. For example: U.S. EPA AP-42 emission factors; stack test data; mass balance; process data; etc..

Note, you may choose (optional) to submit your potential to emit analysis for other pollutants that you do not believe require federally enforceable permit restrictions. By submitting this additional analysis it will ensure that the Agency concurs with your estimates.

4. Provide recommended limitations for the permit to restrict emissions that are federally enforceable. Such permit conditions should be in the form of compliance procedures and/or operation, production, and emission limitations supplied for each emission unit to be limited at the facility.

5. An explanation of how compliance with the proposed restrictions will be demonstrated on both an initial and ongoing basis. These restrictions should be designed so that an inspector on any given day (or greater time period up to a month if daily is technically or economically infeasible) can establish that the restricted potential to emit will not exceed the major classification threshold. Ohio EPA recommends the rolling 365-day restriction option. For more information, see the "Limiting Potential to Emit" attachment.

6. A description of what record keeping will be utilized to verify compliance. Clearly explain what records of the operating parameters are being kept and how these records can be used to verify compliance with the proposed permit limitations. Also, a statement requiring that the records be retained for a minimum of three years.

7 Updated information and diagrams describing any changes from data and information in the current application on file with our agency.

8. Must provide for affected emission units a short-term (e.g., hourly, daily) limit (this should be an existing limit) on emissions for the pollutants that restrictions are being requested. This normally would be established by an OEPA rule (e.g., OAC Chapter 3745-21 for VOC, OAC 3745-18 for SO_2, OAC Chapter 3745-17 for PM, etc.) or a best available technology emission limit under a permit to install (PTI).

If you find that an existing short-term limit does not already exist for the subject source, contact your DO or **LAA** representative for assistance.

Note, it is **not** necessary that this short-term emission limit calculated out for an entire year at maximum operating rate restricts the emission unit to below the major classification threshold level. It normally will be the short-term production and/or operational restrictions that ensures the facility's emissions are maintained below the major classification threshold.

All of this information will need to be submitted to the appropriate District Office (DO) or Local Air Agency (LAA) in your area.

One final warning... Please think carefully about any new restrictions you are agreeing to. Can you live with these restrictions for the foreseeable future? Can you comply with these restrictions? In order to get these restrictions lifted in the future, you may have to go through a lengthy new source review permitting process. This could delay future expansion, so research these issues carefully before making your request to accept these restrictions. Obviously, Title V permitting is complicated and time consuming. However, you will find that it is a much better option than voluntarily accepting restrictions that your company can **not** live with.

If you have any questions regarding the information in this letter, please contact the designated DO or LAA in your area.

Please review the attached information for additional clarification of what is required to ensure federal enforceability of permit conditions.

Sincerely,

Thomas G. Rigo, Manager
Field Operations and Permit Section
Division of Air Pollution Control
TGR/JB/attachments FESCVLT & FESOP2

Limiting Potential to Emit

Existing facilities will need to examine current permits and rules to determine potential to emit. Items that can be considered for restricting the potential to emit include: OAC rule limits (if federally approved); federal rules (PSD, NSPS, etc.); existing PTI's with federally enforceable restrictions, and any Findings & Orders which have been federally approved as a SIP revision. Note: A federally enforceable restriction in a PTI has to be a restriction with adequate recordkeeping and reporting that restricts your facility below the major pollutant threshold. Also, this PTI had to be issued as a draft initially (which allowed for public and USEPA comment) before the final PTI was issued. You may want to have the appropriate DO or LAA confirm that you currently have a federally enforceable PTI restriction.

If none of the above apply, then the potential to emit must be calculated assuming the emission unit operates 24 hours per day and 365 days per year at the maximum operating capacity.

There are essentially two methods to use to restrict emissions: **production & operational** restrictions. Production limits are restrictions on the amount of final product which can be manufactured at a source. Operational limits are all other restrictions on the manner in which a source is operated, including hours of operation, amount of raw material consumed, fuel combusted, or conditions which specify that the source must install and maintain add-on controls that operate at a specified emission rate or efficiency.

U.S. EPA will only accept short term restrictions to ensure federal enforceability. The restriction cannot be longer than monthly unless we establish a rolling 365 day or rolling monthly restriction. If a monthly rolling restriction is preferred, you must prove that daily records are technically infeasible or economically unreasonable. A strict daily, weekly or monthly restriction will also be accepted. The U.S. EPA prefers strict limitations in the permits. For example, a coating usage restriction of X gallons per day; XX gals/week; or XXX gals/month. As noted, we could also restrict the source to XXXX gallons per rolling 365 day period. The rolling limitation would require the company to calculate daily the amount of coatings used in addition to the previous 364 days. If your company has not maintained these types of records in the past, then it will be necessary to have different restrictions in the initial year of the permit to demonstrate compliance on a short-term (e.g., monthly) basis to establish your synthetic minor status. See actual permit examples 1, 2, and 3.

Example Problems

1. Coating Operation

The existing permit has the following limits specified: 5 lbs VOC/gal.; 40 lbs VOC/hr (at maximum operating conditions); 80 tons VOC per year. The coating operation is not subject to any limitations in the Ohio Administrative Code rules; not subject to any federal limitations; and there is no add-on control equipment utilized. This permit would not be considered to be federally enforceable, and hence the company would be subject to the Title V requirements. The reason is that the potential to emit would have to be calculated as follows:

40 lbs/hr x 24 hrs/day x 365 days/year x ton/2000 lbs = 175.2 tpy

In order to restrict the potential to emit, the company would have to apply for a Federally Enforceable State Operating Permit (FESOP). For example, the company could request that the source be restricted to the use of no more than 2,667 gallons per month, with the appropriate record keeping [daily, weekly, or monthly] and reporting requirements.

2,667 gal/mon x 5 lbs VOC/gal x 12 mon/yr x ton/2000 lbs = 80 tpy
[This value for a criteria pollutant can be designed up to 99 tpy. However, the closer to the major threshold you design your restriction results in less room for error and greater scrutiny by the Agencies (OEPA and USEPA).]

**Please note that Hazardous Air Pollutants (HAPS) have not been evaluated in this example, and should be examined if applicable.

2. Rock Crushing Operation

The existing permit contains the following: OAC Rule limit of 69 lbs PM/hr (uncontrolled limit based on maximum process weight rate of 500 tons per hour); controlled by baghouse; 30.2 tpy PM. The source is not subject to any federal rules, and the permit was not issued draft to allow for the 30 day public comment period. The company would be subject to Title V since the permit does not contain terms and conditions which are federally enforceable. The potential to emit would be calculated as follows:

69 lbs/hr x 24 hrs/day x 365 days/yr x ton/2000 lbs = 302 tpy PM

The company would have to apply for a FESOP in order to restrict the potential to emit to reflect actual operating conditions. In this case the company would have to specify capture and control efficiencies for the baghouse. For instance 100% capture and 90% control. In addition, the company would have to either specify monitoring of the baghouse efficiency (e.g. pressure drop across the baghouse; regular inspection of the bags), or install a continuous emission monitor. The permit would also contain appropriate record keeping and reporting requirements. The new potential would be calculated as follows:

overall control efficiency - 1 x .9 = 90%

69 lbs/hr x 24 hrs/day x 365 days/yr x ton/2000 lbs x (1 - 0.9)
= 30.2 tpy

*****Please note that any restrictions which you apply for, you must be comfortable that your company will be able to comply with those restrictions.**

Potential to Emit Analysis

For the sake of brevity, the following analyses assumes that no add-on pollution controls are employed and the emission units are not subject to any federal standards (i.e. NESHAPS, NSPS). The emission limits specified are either established federally enforceable BAT limits or OAC rule limits.

METAL WORKING FACILITY
CURRENT POTENTIAL TO EMIT

24 hrs/day x 365 days/yr x ton/2000 lbs. = 4.38

UNIT	DESCRIPTION	PERMIT LIMIT	POTENTIAL
	Drilling & Grinding	2 lbs PM/hr x 4.38	8.76 tpy PM
P002	Shredding	19.2 lbs PM/hr x 4.38	84.1 tpy PM
P003	Forming	19.2 lbs PM/hr x 4.38	84.1 tpy PM
	9 MMBtu/hr Boiler - using natural gas	0.18 lbs PM/hr x 4.38	0.79 tpy PM
		0.9 lbs NOx/hr x 4.38	3.9 tpy NOx
		0.19 lbs CO/hr x 4.38	0.83 tpy CO

	PM	NOx	CO
	8.76 tpy	3.9 tpy	0.83 tpy
	84.1 tpy		
	84.1 tpy		
	0.79 tpy		
TOTALS	177.75 tpy	3.9 tpy	0.83 tpy

PROPOSED RESTRICTED POTENTIAL TO EMIT

The company submits a FESOP application to request federally enforceable conditions to restrict the hours of operation for emission units P002 and P003. The company proposes a restriction of 4000 hour per rolling 365 day period per emission unit.

4000 hrs/yr x ton/2000 lbs 2

UNIT	DESCRIPTION	PERMIT LIMIT	NEW POTENTIAL
	Drilling & Grinding	2 lbs PM/hr x 4.38	8.76 tpy PM
	Shredding	19.2 lbs PM/hr x 2	38.4 tpy PM
P003	Forming	19.2 lbs PM/hr x 2	38.4 tpy PM
B001	9 MMBtu/hr Boiler - using natural gas	0.18 lbs PM/hr x 4.38	0.79 tpy PM
		0.9 lbs NOx/hr x 4.38	3.9 tpy NOx
		0.19 lbs CO/hr x 4.38	0.83 tpy CO

	PM	NOx	CO
	8.76	3.9	0.83
	38.4		
	38.4		
	0.79		
TOTALS	86.35	3.9	0.83

**Please note that we only evaluated PM, NOx, and CO for the boiler - again this was done for the sake of brevity as we are certain that emissions of the other pollutants generated by the boiler would be negligible. Depending on your situation, the other pollutants should be evaluated as well.

Actual Examples of Federally Enforceable Restrictions Contained In OEPA Permits To Install

Note: These examples are for restrictions necessary to avoid more complicated federal New Source Review permits (i.e., PSD or Offset permits). Therefore, some of the criteria and major classification thresholds are different than the restrictions required for avoiding Title V permitting. However, the actual establishment of requirements to restrict an entity's potential to emit involves the same concepts.

Example 1

This is an example of a steel making facility which obtained federally enforceable restrictions on several emission units. Specifically, this provides an example of production restrictions based on a 365-day rolling average. It also provides an example of interim first year restrictions until enough data is obtained to determine compliance on a 365-day rolling average basis.

ADDITIONAL SPECIAL TERMS AND CONDITIONS

Short-term limit

1. The 613 MMBTU/hr maximum heat input, natural gas-fired walking beam furnace (P065) covered by this Permit to Install No. 13-237C is limited to a maximum of 0.02 pounds of particulate per million BTU Heat Input (0.02 lb/MMBTU) and a maximum Nitrogen Oxides (NO_x) limitation of the lesser of 1.2 times the actual rate as determined by testing and 0.4 lb/MMBTU.

Operational restriction

2. The walking beam furnace (P065) shall be limited to a maximum of 2200 million cubic feet of natural gas used per rolling 365 day period. The facility shall maintain records indicating the daily amount of natural gas consumed, the calculated rolling 365 day total amount of gas used and the amount of steel processed ir this walking beam furnace. In order to ensure federal enforceability, for the first twelve calendar months of operation, shall not exceed the following usage limits for the specific time period.

1st year operational restrictions until the rolling 365-day average period is known

Month	Total Allowable Usage
1	183.3 million cubic feet
1,2	366.7 million cubic feet
1-3	550.0 million cubic feet
1-4	733.3 million cubic feet
1-5	916.7 million cubic feet
1-6	100.0 million cubic feet
1-7	283.3 million cubic feet
1-8	466.7 million cubic feet
1-9	1650.0 million cubic feet
1-10	1833.3 million cubic feet
1-11	2016.7 million cubic feet
1-12	2200.0 million cubic feet

Recordkeeping and reporting requirements

After the first twelve months of operation, shall conform with the limitations and reporting requirements of this condition. Quarterly reports summarizing this data and an indication of any exceedances of the gas usage limitation shall be submitted to Cleveland Division of Air Pollution Control.

Short-term emission limit

3 The 440 tons/hr double strand, continuous steel slab casting operation (P066), covered by this Permit to Install No. 13-2370 is equipped with a water spray system to capture all visible emissions

generated at the torch cut-off area. It is located at the No. 1 BOF Area anc is limited to a maximum particulate emission rate of 0.14 pounds per hour (lb/hr) and a maximum visible emission of 5% (five percent) opacity, six minute average, in any exhaust gases from this operation.

4. The ladel metallurgy refining process (P067) covered by this Permit to Install No. 13-2370 consists of addition/injection of alloying materials and electric arc reheating of molten steel. This process is equipped with a baghouse control system which shall be operated at sufficient volume flow rate to capture visible emissions generated by this process to achieve a maximum particulate emission rate of 0.0052 grains per dry standard cubic foot of exhaust gas (gr/dscf), 4.51 lb/hr and a maximum visible emissions of 5% opacity, six minute average in the control device outlet and in any fugitive emissions that result from this process. The process shall be equipped with a continuous differential pressure monitor with recorder across the baghouse. Differential pressure will be monitored at each module as well. Temperature will also be monitored for each module and the fan bearings. The record from the pressure monitor will be kept for two years and available for inspection by the agency.

produciton restriction

5. Steel feed to the new continuous caster (P066) under this permit shall be restricted to a maximum of 2.36 million tons of steel per rolling 365 day period. Compliance shall be determined by the rolling 365 day total with every day setting a separate 365 day period that must achieve production compliance. The facility shall maintain records indicating the daily amount of steel fed to the caster and the calculated rolling 365 day total amount of steel fed to the caster. In order to insure federal enforceability, for the first twelve calendar months of operation, shall not exceed the following production levels.

1st year production restrictions until the rolling 365-day average period is known

Month	Production
1	0.196 million tons
1,2	0.393 million tons
1-3	0.590 million tons
1-4	0.787 million tons
1-5	0.983 million tons
1-6	1.180 million tons
1-7	1.377 million tons
1-8	1.573 million tons
1-9	1.770 million tons
1-10	1.967 million tons

Month	Production
1-11	2.163 million tons
1-12	2.36 million tons

After the first twelve months of operation, shall conform with the limitations and reporting requirements of this condition. Quarterly reports summarizing this data and an indication of any exceedances of the steel production limitation shall be submitted to Cleveland Division of Air Pollution Control.

6. Within 180 days of commencement of production from these new facilities the 613 MMBTU/hr natural gas-fired walking beam furnace (P065), the 440 Tons/hr double strand continuous steel slab casting operation (P066) and the ladle metallurgy refining process (P067), shal permanently remove from service (or permanently cease operation of) the following existing sources:

East Side Soaking Pits 1318001613 P014 through P018, inclusive),

West Side Soaking Pits (1318000078 P014 through P022, inclusive),

C-2 Blast Furnace 1318001613 P901 and dedicated stoves,

C-3 Blast Furnace 1318000078 P902) and dedicated stoves,

No. 1 BOF Teeming Process 1318000078 F011),

No. 1 Coke Plant (1318001613 B901, B902, B903 and B904)

In the event of an emergency, after the closure of the soaking pits is permitted to pour hot metal into ingot molds. These ingots cannot be placed in the soaking pits, but must be shipped off-site or used as scrap

7. Upon initiation of operation of the continuous caster, will limi coke production at the No. 2 coke plant to 596,136 tons per rolling 12 month period. Compliance will be determined from the first month and shall include the previous 12 month period. The facility shall maintain records indicating the monthly amount of coke produced and the calculate rolling 12 month total amount of coke produced. Quarterly reports summarizing this data and an indication of exceedances of the coke production limitation shall be submitted to the Cleveland Division of Air Pollution Control.

Example 2

This example is for a coating operation which maintains daily records on the amount of VOC content in coatings that was applied. Again, compliance is maintained on a 365-day rolling average basis for annual amount of VOC content of coatings applied. Also, recordkeeping and reporting requirements are established for demonstrating that the control device is performing as designed. In addition, the interim first year restrictions are provided until enough data is obtained to determine compliance on a 365-day rolling average basis.

ADDITIONAL SPECIAL TERMS AND CONDITIONS

1. This permit to install is for a 61" Faustel coater (F-2) including a reverse roll coating station/drying oven, unwind, windup and accessory equipment It is controlled by a Hirt Combustion Engineering Inc. Thermal Oxidizer.

2. shall operate this source so that VOC emissions do not exceed (a) 0.2 Kg of VOC per Kg of coating solids applied as calculated on a weighted average basis for one calendar month or (b) a 90 percent overall VOC reduction as calculated over a calendar month or the percent overall VOC reduction specified in 60.443(b) as calculated over a calendar month

3. shall install, operate, and maintain a thermal oxidizer on this source which has an overall VOC destruction efficiency of at least 98% by weight (100% capture efficiency and 98% destruction efficiency). The thermal oxidizer shall be designed and operated according to good engineering practice and manufacturer's specifications.

Short term emission limits

4. may apply water-based coatings (emulsions) to the extent that the VOC emissions do not exceed (a) the limit specified in paragraph 2a above , and b, 2.6 lbs of VOC per gallon of coating applied. The thermal oxidizer need not be used when emulsions are being applied.

5. shall install, calibrate, maintain, and operate a monitoring device which continuously indicates and records the temperature of the thermal oxidizer's exhause gases. Avery shall record all 3-hour periods (during actual coating operations) during which the average temperature of the device is more then 28°C (50°F) below the average temperature of the device during the most recent performance testing complying with the requirements of this permit.

6. shall conduct performance testing for VOC emissions as required by the NSPS at 40 CFR Part 60.444.

7 shall conduct efficiency testing on the thermal oxidizer system. US EPA Reference Method 25 (if VOC concentrations in the outlet are expected to be greater than 50 ppm) or an equivalent method acceptable to Ohio EPA must be used.

8. shall conduct capture efficiency testing using US EPA Method 204.

9. The 4-way safety bypass must be closed to the atmosphere during all operations and all associated safety mechanisms and switches must be properly maintained according to good engineering practices.

Annual emissions limit production restriction on a 365-day rolling average basis

10. The annual emissions from this source shall be limited to 39 tons of VOC per year. To accomplish this, shall limit coating usage sucl that the annual VOC content of the coatings applied is no more than 1.95(tons per rolling 365 day period. In order to ensure federal enforceability during the first 12 months of operation shall not exceed th(following cumulative monthly usage restrictions:

1st year restrictions ntil enough data is known to establish compliance on a 365-day rolling average production limit.

Month	Tons of VOC Applied*
1	246
1&2	467
1-3	663
1-4	834
1-5	980
1-6	1,126
1-7	1,272
1-8	1,418
1-9	1,564
1-10	1,710
1-11	1,830
1-12	1,950

* Based upon VOC content and amount of coatings (before control). Thereafter, shall recalculate daily the annual VOC content of th(coatings applied. Each day shall start a new 365 day period.

Recordkeeping requirements

11. shall maintain the following daily records:

a. for the solvent based surface coatings employed in this source:

i. A log or record of the operating time for the capture (collection) system, control device, monitoring equipment, and the associated coating line; and

Recordkeeping and reporting of the add-on control device

ii. For the termal oxidizer, all 3-hour periods (during actual coating operations) during which the average temperature of the thermal oxidizer is more than 28°C (50°F) below the average combustion temperature of the device during the most recent performance test that demonstrated that the source was in compliance.

b. for the water based surface coatings employed in this source:

i. The name and identification number of each coating, as applied; and

ii. The mass of VOC per volume of each coating (excluding water and exempt solvents), as applied.

c. the total tons of VOC applied (for the first year of this permit) should be shown as the cumulative monthly usage starting with the first month after the effective date of this permit, and for subsequent years it should be shown as the rolling annual average recalculated each day.

These daily records, as well as any supporting coating analyses and computations, shall be retained in the company's files for a period of not less than three years and shall be made available to the Director or any authorized representative for review during normal business hours.

Reporting requirements

The daily records shall be summarized monthly and reported to the Northeast District Office on a quarterly basis.
The reports shall be submitted by April 30, July 31, October 31, and January 31 of each year for the previous three calendar months.
shall notify the Ohio EPA, Northeast District Office, as soon as possible, but no later than 45 days after the exceedance occurs, of any daily record that shows that the daily volume weighted VOC content exceeds the applicable emission limitation, the cause of the exceedance, and any corrective action taken to prevent its reoccurrence.

SYNTHETIC MONOR DETERMINATION

A. Source Description: has proposed to install a new pressure-sensitive adhesive coater (K002) at their Hardy Rd. plant. Emissions will be limited to 2.6 lbs of VOC per gallon of coating applied, minus water as well as the NSPS, Subpar RR limit of 0.2 Kg of VOC per Kg of coating solids applied. Emissions will be controlled by a thermal oxidizer.

B. Facility Emissions and Attainment Status: Lake County is a non-attainment area fo ozone. The existing facility emissions are limited by PTI #02-3702 to 39 tons of VOC per year.

C New source Emissions: Potential emissions from the coater will not exceed 100 tons/yr of VOC. has proposed (in order to keep the total facility emissions below 100 tons per year so that future expansions will not be subject t NSR) to restrict emissions the annual VOC content of the coatings applied to less than 1,950 tons/yr by accepting monthly cumulative emission limitations such tha the emissions will not exceed 39 tons/yr of VOC. Due to the wide variety of coatings and products and the unpredictable nature of the operation, this will be tracked and enforced through daily recordkeeping and quarterly reporting of coatin usage and emissions.

D. Conclusions: The installation of K002 with emission limitations will result in emissions of 39 tons/yr of VOC. Since this is less than 100 tons/yr, the Emission Offset Policy (Federal New Source Review) for ozone (VOC) will not apply.

Example 3

This example provides limiting the potential to emit for 3 diesel-fired internal combustion engines (to generate power) by limiting annual operating hours utilizing a 12-month rolling average. In addition, the interim first year restrictions are provided until enough data is obtained to determine compliance on a 12-month rolling average basis.

SUMMARY
TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

Pollutant	Tons/Year
PM	7.49
SO_2	8.88
VOC	8.88
NO_x	99.96
CO	23.70

CONSTRUCTION STATUS

The Akron Air Pollution Control shall be notified in writing as to (a) the constructior starting date, (b) the construction completion date, and (c) the date the facilities were placed into operation for the following sources: B001, B002, B003.

RECORD(S) RETENTION AND AVAILABILITY

All records required by this Permit to Install shall be retained on file for a period of not less than three years unless otherwise indicated by Ohio Environmental Protection Agency. All records shall be made available to the Director, or any representative of the Director, for review during normal business hours.

REPORTING REQUIREMENTS

Unless otherwise specified, reports required by the Permit to Install need only be submitted to Akron Air Pollution Control, 177 South Broadway, Akron, Ohio 44308.

WASTE DISPOSAL

The owner/operator shall comply with any applicable state and federal requirements governing the storage, treatment, transport and disposal of any waste material generated by the operation of the sources.

MAINTENANCE OF EQUIPMENT

This source and its associated air pollution control system(s) shall be maintained regularly in accordance with good engineering practices and the recommendations of the respective manufacturers in order to minimize air contaminant emissions.

MALFUNCTION/ABATEMENT

In accordance with OAC RULE 3745-15-06, any malfunction of the source(s) or associated air pollution control system(s) shall be reported immediately to the Akron Air Pollution Control, 177 South Broadway, Akron, Ohio 44308.

Except as provided by OAC Rule 3745-15-06(A)(3), scheduled maintenance of air pollution control equipment that requires the shutdown or bypassing of air pollution control system(s) must be accompanied by the shutdown of the associated air pollution sources.

AIR POLLUTION NUISANCES PROHIBITED

The air contaminant source(s) identified in this permit may not cause a public nuisance in violation of OAC Rule 3745-15-07.

CONSTRUCTION COMPLIANCE CERTIFICATION

The applicant shall provide Ohio EPA with a written certification (see enclosed form) that the facility has been constructed in accordance with the Permit to Instal application and the terms and conditions of the Permit to Install. The certification shall be provided to Ohio EPA upon completion of construction but prior to startup of the source.

ADDITIONAL SPECIAL TERMS AND CONDITIONS

A. PTI 16-1366 is for the installation of three (3) Caterpillar stationary internal combustion engines (sources B001, B002, B003) model 3516, which will be used to produce standby electric power. Each engine has a maximum output rating of 1800 Kw and can burn a maximum of 124.7 gallons per hour of #2 diesel fuel oil. Maximum input to each engine is 17.02 MMBTU/hr.

B. In accordance with the BAT requirements of OAC Rule 3745-31-05, air emissions from each source shall not exceed the following:

1 particulate matter: 0.25 pound per million BTU actual heat input and 4.3 pounds per hour;

2. sulfur dioxide: 0.3 pound per million BTU actual heat input and 5.1 pounds per hour;

3. carbon monoxide: 0.80 pound per million BTU actual heat input and 13.61 pounds per hour;

4. volatile organic compounds (VOC): 0.30 pounds per million BTU actual heat input and 5.1 pounds per hour;

Short-term NO_x emission requirement

5. oxides of nitrogen: 10.14 grams per horsepower-hour and 57.4 pounds per hour; and

6. visible particulate emissions shall not exceed 5% opacity on a six minute average except for a one hour period during the startup of the engine. Visible particulate emissions during this one hour period shall not exceed 20% opacity on a six minute average.

C. <u>Operating Limitations & Recordkeeping Requirements</u>

lling 12-month average restrictions

1 Sources B001, B002, B003 each shall be limited to operating 1161 hours per rolling 12 month period. In addition, each engine shall be limited to burning 144,777 gallons of diesel fuel oil over a rolling twelve month average with each month setting a separate 12 month period.

For recordkeeping purposes

2. Each engine shall be equipped with a timer.

3. The facility shall maintain monthly records which lists the following information for each source:

Recordkeeping requirements

(a) the source number;

(b) the total gallons of fuel consumed per source for that month and the previous 12 month period; and

(c) the total hours of operation per source, for that month and the previous 12 month period.

Record retention

These records shall be maintained in a bound log book at the facility and/o at the facility's headquarters for a minimum of three years and shall be made available to representatives of the Ohio EPA upon request during normal business hours.

4. In order to ensure federal enforceability, for the first twelve calendar months of operation, shall not exceed the operating levels specified in Table I.

Table I

1st year interim requirements until enough data is known to comply with the 12-month rolling average

Month	Hours of Operation*			Gallons of Fuel Oil Burned*		
	B001	B002	B003	B001	B002	B003
1	97	97	97	12,065	12,065	12,065
2	194	194	194	24,130	24,130	24,130
3	291	291	291	36,195	36,195	36,195
4	388	388	388	48,260	48,260	48,260
5	485	485	485	60,325	60,325	60,325
6	582	582	582	72,390	72,390	72,390
7	679	679	679	84,455	84,455	84,455
8	776	776	776	96,520	96,520	96,520
9	873	873	873	108,585	108,585	108,585
10	970	970	970	120,650	120,650	120,650
11	1067	1067	1067	132,715	132,715	132,715
12	1161	1161	1161	144,777	144,777	144,777

* total accumulative

These records, as well as any supporting analyses and computations, shall be retained on file at the facility's headquarters for a period of not less than three years. All records shall be made available to any authorized representative of the Director of the Ohio EPA for review during normal business hours.

D. Fuel Sampling

1. Periodic fuel sampling and analysis (at a minimum, annually) shall be done in accordance with 40 CFR, Part 60, "Appendix A", Method 19, or the appropriate ASTM methods, or equivalent methods as approved by the director of the Ohio EPA. In lieu of performing on-site sampling, representative fuel analyses performed by fuel suppliers may be acceptable This procedure must be done at least on an annual basis. The

representative sulfur dioxide emission rate from any sample shall be calculated using the formula in OAC Rule 3745-18-04 (F)(2) Measurement Methods and Procedures. The results of these analyses must be maintained in the facility's files for a period of not less than three years.

E. Reporting requirements

1 shall submit quarterly reports to the Akron Regional Air Quality Management Disitrict which summarize the following information for sources B001, B002, B003 for each month in the quarter:

(a) hours of operation per month;

rolling twelve month total of operating hours;

gallons of diesel fuel oil burned per month; and

rolling twelve month total of diesel fuel oil burned

The reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall cover the previous three calendar months (October through December, January through March, April through June, and July through September, respectively).

2. shall immediately notify the Akron Regional Air Quality Management District of any exceedance of the hours of operation and the amount of fuel oil burned in accordance with the restrictions of this permit. In adition, the company shall submit an annual report documenting the above exceedance(s) of the hours of operation and the amount of fuel oil burned in accordance with the restrictions of this permit.

For each excursion, the company shall also provide the following additional information:

(a) the cause of the excursion; and

the action that has been taken to correct the violation and prevent futher occurrences.

The report shall be submitted by February 15 of each year and shall cover the previous 12 month period. If no exceedance(s) occurred, a report stating that fact is still required.

3. All reports are to be submitted to the Akron Regional Quality Management District, 177 South Broadway, Akron, Ohio 44308.

Permit to Install #16-1366

SYNTHETIC MINOR DERERMINATION

A. Source Description:

has proposed to install three (3) diesel-fired stationary internal combustion engines (B001, B002, B003) for standby electric generation.

B. Facility Emissions and Attainment Status:

is a new installation located in the city of Wadsworth, Medina County. Medina County is non-attainment for ozone.

C. New Source Emissions:

Potential emissions from each of the three sources are 251.4 tons per year of NOx based on 8,760 hours per year. Total facility emissions would be 754.2 tons per year. has proposed to limit operation to 1,161 hours per rolling 12-month period for each source. In addition, each engine will be limited to burning 144,777 gallons of diesel fuel oil over a rolling 12-month period.

D. Conclusion:

The installation of B001, B002, and B003 with operating restrictions of 1,161 hours and 144,777 gallons fuel oil per rolling 12-month period per source will result in facility emissions of 99.96 tons per year. Since this is less than 100 tons per year, will not be considered a major source and will not be subject to the Emission Offset Policy.

Giao Nguyen
7/1/94

OAC 3745-35-07 <u>Federally enforceable limitations on potential to emit.</u>

(A) For purposes of this rule, "potential to emit" means the maximum capacity of a stationary source to emit any federally regulated air pollutant, as defined in paragraph (DD) of rule 3745-77-01 of the Administrative Code, under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit a federally regulated air pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation is enforceable by the administrator as defined in paragraph (B) of rule 3745-77-01 of the Administrative Code. The term does not alter or affect the use of this term for any other purposes under the Clean Air Act, or the term "capacity factor" as used in Title IV of the Clean Air Act, as amended, or the regulations promulgated thereunder.

(B) Federally enforceable limitations on the potential to emit of a source may be established through any of the following mechanisms:

(1) Terms and conditions of a final permit to install issued by the director under Chapter 3745-31 of the Administrative Code;

(2) Terms and conditions of a final permit to operate issued under this chapter, provided that only those terms and conditions necessary to limit the potential to emit of the source and expressly designated as federally enforceable shall be federally enforceable, and provided further that the permit was first issued as a draft or proposed action with an opportunity for public comment under rule 3745-47-05 of the Administrative Code. With concurrent notice and opportunity for comment given to the administrator of the United States environmental protection agency region 5. During the public comment period, IF the administrator objects that the terms and conditions of the permit to operate are not federally enforceable the director shall not issue the permit to operate until such objection has been resolved; or

(3) Rules or orders of the director that are submitted to and approved by the administrator as revisions to the state implementation plan under sections 110 and 112 (l) of the Clean Air Act, as amended.

Upon the request of the owner or operator of a stationary source, any of the mechanisms provided in paragraphs (B)(1), (B)(2), or (B)(3) of this rule shall allow for trading of emissions increases and decreases among emission units located at the same source that is consistent with the Clean Air Act for the purpose of complying with a federally enforceable cap on the potential to emit of the source. Such limitations shall ensure that the

trades are quantifiable and enforceable and require seven-day advance notification to the appropriate Ohio EPA district office or delegated local air agency.

(C) In order to be federally enforceable, a limitation must:

(1 Specify an annual limit on emissions from the source;

(2) Specify a short-term limit on emissions for each pollutant to be restricted, and specify a short-term limit on production or operation, provided that for purposes of this rule, acceptable short-term limitations on production or operation shall include but not be limited to a thirty day average or three hundred and sixty-five day rolling average limitation computed each calendar day; and

(3) Specify adequate and enforceable methods for establishing compliance with the annual and short-term limits, using methods from 40 CFR 60 Appendix A or 40 CFR 51 Appendix M where appropriate; and

(4) Be no less stringent than any federally applicable requirement to which the source is subject.

(D) Approval of this rule by the administrator is a prerequisite of federal enforceability of limitations under paragraph (B)(2) of this rule.

Effective: November 18, 1994

Certification: *(signed by Donald R Schregardus, Director)*

November 3, 1994
Date

Promulgated under: Revised Code Chapter 119
Rule Amplifies: R.C. 3704.03
R.C. 3704.036
Prior Effective Date: 4/20/94

Ohio EPA
Division of Air Pollution Control

inter-office communication

to: LAA Directors, DO Air Unit Supervisors

from: Clara Dailey, Jim Orlemann

subject: Synthetic Minor Permit Package Guidance

date: December 8, 1994

From this day forward, any PTI/PTO modifications, PACNs, or Renewal Notices associated with making a facility a synthetic minor rather than a Title V facility must have one of the enclosed pink sheets attached to the front of the information package. This is so we can easily recognize each request and make it our priority. Also, please include in the package:

a copy of the potential to emit analysis from the facility;

a summary of the synthetic minor determination similar to the example in the guidance document dated 11/30/94; and

(c the modification, PACN, or renewal notice, and associated terms and conditions.

Please note that the terms and conditions must clearly identify all of the federally enforceable requirements of the permit, including any monitoring, recordkeeping, and reporting requirements associated with an emission limitation or operational restriction. This can be accomplished by including a separate term and condition that reads as follows:

The following requirements of this permit to operate are federally enforceable requirements:

(a)
(b)
etc

(actually restate each requirement or refer to the special term and condition (STC) that specifies the requirement)

Finally, if you wish, when you forward an information package to the Central Office for processing, you may include a diskette containing the STC's or E-mail the STC's to Jim Orlemann, address

FESOP

for

SYNTHETIC MINORS

LAA/DO Permit Engineer_____

LAA/DO Office Phone No._____

Date Request Received from Company_____

Date Package Forwarded to CO_____

CO Engineer_____

Date Package Received by CO_____

Date CO Review Complete_____

Result of Review_____

From: Jim Braun (JBRAUN)
To: TRIGO, JORLEMAN, CDAILEY
Date: Tuesday, December 13, 1994 11:50 am
Subject: FESOP's

Tom, Jim, & Clara:

Dan Schiltz from Canton asked the following questions & would appreciate some guidance:

1. What terms and conditions should be specifically designated as federally enforceable? He would like some examples of when terms and conditions only address State requirements.

2. Is the FESOP going to be a brand new permit? Or is it a modification to their existing permit? They can modify an existing permit with new terms and conditions, using the program that we mailed on Dec. 8, 1994 from Jim O. and Clara.

3. What needs to be done for the change from T - status to A - status? To change from T to A, using the PACN that is x'ed out on lines 1-2-3, complete 4,5,and 6 attach new terms and conditions, and attach the cherry cover following the directions sent on the Dec 8 memo.

4. Should terms and conditions be written for each emission unit separately? On permits to operate, yes, because they are still a permit for each emission unit.

5. Dan would appreciate clarification of item (c) from the December 8 memo from Clara & Jim. Item (c) addressed the modification, PACN, or renewal notice, and associated terms and conditions. For PTO's there is three ways to try to put an emission unit into synthetic minor, if it is first issue, you can use the pacn, cherry cover and the appropriate terms and conditions, if it is in the renewal program and they request synthetic minor than same as PACN. If they have an effective PTO and they request a synthetic minor than you modify by using the modification form, one for each emission unit, cherry cover and the new terms and conditions etc.

Thanks for your guidance. Please let me know if you need any clarification of the questions noted above.

SYNTHETIC MINOR DETERMINATION

A. Source Description: RJF International Corporation has proposed to install a new 54" vinyl wallcovering laminating, one color printer, top coating and embossing line (K011).

B. Facility Emissions and Attainment Status: RJF International is a major stationary source. Washington County is designated as attainment county for ozone.

C. New Source Emissions: Source allowable emission are 1 lb. V.O.C. per lb. ink solids as determined by NSPS Subpart FFF. The permit to install will contain terms and conditions to limit RJF International Corp. to 11,667 gallons of coatings per month and the coating shall not exceed .54 pounds V.O.C. per gallon.

D. Conclusions: The terms and conditions in the permit to install will limit K011 to 11,667 gallons of coating per month and the coating shall not exceed .54 pounds V.O.C. per gallon. RJF International Corp. shall maintain a monthly record of the total coating material usage and V.O.C. emissions for each month as well as for the consecutive twelve month period. Quarterly reports will be required to assure compliance. The facility will emit less than the significant emission rate in 40 CFR 52.21(b)(23) for V.O.C.'s. Therefore, the source will not be subject to Prevention of Significant Deterioration (PSD) review.

ALLIED-SIGNAL INC., ENGINEERED MATERIALS
NETTING CALCULATIONS AND SYNTHETIC MINOR DETERMINATION

A. Source Description: Allied-Signal, Inc. has proposed to install one (1) 80 x 10^6 Btu/hour fluidized bed boiler (FBB) with continuous limestone injection, preheat, associated storage tanks for liquid fuels, and fugitive dust sources (storage piles, conveying and handling) for solid fuels.

B. Facility Emissions and Air Quality Designation: Allied-Signal is one of the 28 source categories in the Prevention of Significant Deterioration (PSD) regulations. The facility would be considered a major for sulfur dioxide and nitrogen dioxide and a minor for other criteria pollutants. The location is nonattainment for particulate matter (PM) and attainment for all other pollutants.

C. Existing Source Credit: Allied-Signal intends to construct the FBB to replace the existing steam generation units. However, the existing boilers will not be abandoned but will be used on a stand-by basis for burning coal tars when the FBB is not operational and to provide supplemental heat, burning natural gas, when the FBB is operational. Allied-Signal intends to limit fuel usage in boilers B001-B004 to natural gas with a maximum heat input not to exceed 7.08 x 10^9 Btu/month. Natural gas consumption will increase above these levels if the FBB operates at less than maximum allowed capacity. The following is a summary of the actual emissions from boilers B001-B004 for 1986 and 1987.

Pollutant	Tons/Year
Total Suspended Particulates (TSP)	5.4
Particulate matter less than 10 microns (PM_{10})	5.4
Sulfur dioxide (SO_2)	115.9
Oxides of nitrogen (NO_x)	126.6
Carbon monoxide (CO)	6.4
Volatile organic compounds (VOC)	1.5

D. New Source Emissions: Allied-Signal will restrict fuel usage in the FBB and Preheat to maximum Btu content not to exceed 4.32 x 10^{10} Btu/month. Allied-Signal will continue to operate boilers B001-B004 on natural gas only while operating the FBB. Natural gas usage in boilers B001-B004 will not exceed 7.08 x 10^9 Btu/month.

FBB and Preheat

Pollutant	Best Available Technology (BAT) Emission Limit	Btu/Month	Tons/Year
	0.03 lb/10^6 Btu	4.32×10^{10}	7.76
PM_{10}	0.03 lb/10^6 Btu	4.32×10^{10}	7.76
SO_2	0.60 lb/10^6 Btu	4.32×10^{10}	155.25
NO_x	0.60 lb/10^6 Btu	4.32×10^{10}	155.25
CO	0.31 lb/10^6 Btu	4.32×10^{10}	80.21
		4.32×10^{10}	10.87

In order to ensure that PSD is not triggered, emissions from the facility must not exceed 155.8 tons per year of SO_2 and 166.5 tons per year of NO_x. The facility will be limited to a combination of operating rate restrictions for the new and existing boilers.

Boilers B001-B004

Pollutant	Emission Limit	Fuel Restriction/ Maximum Btu/Month (Natural Gas)	Tons/Year
	0.02 lb/10^6 Btu	7.08×10^9	0.93
PM_{10}	0.02 lb/10^6 Btu	7.08×10^9	0.93
SO_2	0.60 lb/10^6 Ft^3 (AP-42)	7.08×10^9	0.03
NO_x	140.00 lbs/10^6 Ft^3 (AP-42)	7.08×10^9	5.95
CO	35.00 lbs/10^6 Ft^3 (AP-42)	7.08×10^9	1.49
VOC	5.80 lbs/10^6 Ft^3 (AP-42)	7.08×10^9	0.25

Storage Tanks

Pollutant	Tons/Year
VOC	8.70

Fugitive Dust Sources

Pollutant	Tons/Year
TSP	8.10
PM_{10}	4.40

Contemperaneous Emissions

The facility has not had contemperaneous emissions increases for NO_x and/or SO_2 within the last five (5) years.

Total New Source Emissions

Pollutant	Tons/Year
	17.89
PM_{10}	13.69
SO_2	155.28
NO_x	161.20
CO	81.70
	20.77

E. Emissions Increases and Decreases: New source emissions minus emissions from B001-B004 for 1986 and 1987:

TSP	17.89 - 5.40	= 12.49 tons/year
PM_{10}	13.69 - 5.40	= 8.29 tons/year
SO_2	155.28 - 115.90	= 39.38 tons/year
NO_x	161.20 - 126.60	= 34.60 tons/year
CO	81.70 - 6.40	= 75.30 tons/year
VOC	20.77 - 1.50	= 19.27 tons/year

F Conclusions: Limiting the new FBB to a maximum fuel usage not to exceed a Btu content of 5.17×10^{11} Btu/year, and boilers B001-B004 to a maximum fuel usage for natural gas only not to exceed a Btu content of 8.5×10^{10} Btu/year, will result in a net increase of emissions, but less than the significant levels for PSD review. Therefore, the new sources have "netted out" of PSD review.

FEB 23 1989

UPDATED 02/10/89

LTV STEEL COMPANY
NETTING CALCULATIONS

A. Source Description: The LTV Steel Company proposes to install a 173 MM BTU/Hr [Maximum Heat Input] Natural Gas-Fired Controlled Atmosphere Continuous Steel Strip Annealing Line to replace an existing 157 MM BTU/Hr [Maximum Heat Input] Natural Gas-Fired Box Annealing Furnace (P-951).

B. Facility Emissions/Attainment Status: The LTV Steel Company is a major stationary source for Nitrogen Oxides (NOx) and Carbon Monoxides (CO). Cuyahoga County is classifed as attainment for Nitrogen Oxides and non-attainment for Carbon Monoxide.

C. Existing Source Credit: The LTV Steel Company will remove the existing gas-fired box annealing furnace (13-18-00-1613 P053) in addition to previously shutdown (in 1986) boilers (13-18-00-0078 B002 & B003). The actual emissions from this furnace for 1986/1987 and the boilers for 1985 (the last full year of operation) are:

Source	Emissions (tons per year) NOx	CO
	129.5	9.4
B002 & B003	115.2	65.6

D. Contemporaneous Emissions Increases and Decreases: With the removal of 13-18-00-1613 P053 and previously shutdown sources 13-18-00-0078 B002 & B003 in addition to no Permits to Install for any NOx or CO emitting source issued to this company since January 1, 1984, the net changes in emissions at the facility are as follows:

174 TPY 129.5 TPY 115.2 TPY = (70.7 TPY)

CO: 17.4 TPY - 9.4 TPY 65.6 TPY = (57.6 TPY)

E. Conclusions: The installation of the new continuous steel strip annealing line and the removal of the existing box annealing furnace coupled with the previously shutdown boilers will result in a net decrease in facility emissions of 70.7 TPY of NOx emissions and 57.6 TPY of CO emissions. Therefore, the new continuous annealing line has "netted out" of Prevention of Significant Deterioration review for NOx emissions and Emission Offsets for CO emissions.

OhioEPA
State of Ohio Environmental Protection Agency

P.O. Box 1049, 1800 WaterMark Dr.
Columbus, Ohio 43266-0149
(614) 644-3020
FAX (614) 644-2329

George V. Voinovich
Governor

June 3, 1994

Mr. Valdas V. Adamkus
Regional Administrator
U.S. EPA, Region V
77 West Jackson Boulevard
Chicago, Illinois 60604

Dear Mr. Adamkus:

On March 8, 1994, U.S. EPA proposed to disapprove the State of Ohio's New Source Review State Implementation Plan (SIP). On May 3, 1994, U.S. EPA granted Ohio's request for an extension of the public comment period on this proposal to June 3, 1994. We appreciate the additional time granted for us to prepare a response.

After reviewing the Federal Register notice, we believe that U.S EPA has made serious errors in the review of the state plan for new sources. The Ohio EPA has presented U.S. EPA a fully approveable New Source Review SIP that relies on the Clean Air Act and federal regulations. There can be no better foundation for a SIP submittal.

Attached are detailed comments related to the proposed disapproval. Please contact Robert Hodanbosi if you have any questions on this submittal.

Sincerely,

Donald R. Schregardus
Director

RH/MH/
\ioc\nsrstatu.let

cc: Mike Hopkins, DAPC
Jim Braun, DAPC
Misty Parsons, DAPC
Alan Lloyd, DAPC

NSR SIP Submittal - Discussion of Comments

USEPA Comment: *Submittal does not address requirements that applied prior the 1990 CAAA. (see Sept 8, 1993 FR - 58 FR 47211). Generally, by incorporating Appendix S by reference it is deficient because of the deficiencies of Appendix S. Appendix S allows exemptions from offset requirements for resource recovery facilities and temporary sources.*

Response: These deficiencies were addressed in Ohio's response to the comments. Generally, because all Ohio permits must be issued in compliance with State and Federal laws (including the Clean Air Act Amendments of 1990), we have developed guidance which states that the exemptions for resource recovery facilities, etc. contained in Appendix S do not apply because Federal law does not allow the exemption. Because we require permits to be in compliance with Federal law, the exemptions contained in the Appendix S guidelines do not apply.

USEPA Comment: *Appendix S is not explicit in requiring annual, actual emissions offsets. Part D, section 173(c) requires that Ohio clarify that this requirement applies.*

Response: We agree that Appendix S is not explicit in requiring annual, actual

emissions offsets. Ohio has, however, had a policy which requires annual, actual emissions offsets for some time. The plan that we submitted to USEPA included the requirement to use actual emissions as offsets. It says in part "...all sources subject to the nonattainment requirements must secure actual emissions reductions in order for the application to be approvable."

USEPA Comment: *USEPA's review indicated that the statement of permitting criteria does not provide adequate specificity and clarity of criteria by which detailed implementation decisions would be made. No definition of offset ratio is provided, and so it is unclear what averaging time applies, whether offsets are to reflect allowable or actual emissions, whether all emission increases must be offset (e.g. fugitive and secondary emissions), where the offsets must occur, and whether interpollutant offsets are permissible. The statement also does not explicitly state that either VOC or NOx offsets are required.*

Response: These requirements are all contained and specified in either federal rules, the Clean Air Act Amendments of 1990 or in Ohio EPA policy.

USEPA Comment: *The CAAA itself does not explicitly define "major new source" and does not specify major modification thresholds.*

Response: This is correct. Our current rules also do not define "major new source". However, "major stationary source" is very well defined in Appendix S and "new source" is defined in our existing rules. Since our current rules require compliance with Appendix S except where State or Federal law is more stringent, and there is no other State or Federal rule applicable to non attainment areas which defines Appendix S, then the Appendix S definition becomes applicable.

USEPA Comment: *It is not clear whether Ohio intends this apparent reduction from 100 to 40 tons per year of the threshold of source sizes at which major modification trigger new source review requirements.*

Response: The major modification remains the same as in Appendix S. Ohio does not intend to change this threshold.

USEPA Comment: *The statement of permitting criteria does not address many of the questions that would arise in imposing the identified requirements.*

Response: We believe that with our existing legal authority requiring compliance with all applicable rules and laws and requiring compliance with Appendix S (whichever is more stringent), the requirements are well defined. This has been demonstrated by the history of our existing program. Appendix S has been used

extensively in the past to make these determinations and this has resulted in a non attainment permitting program which follows known USEPA guidance, rules and policy.

Ohio EPA is prohibited by state regulation from issuing a permit that does not comply with applicable law. Regardless of the deficiencies in U.S. EPA regulations, Ohio EPA cannot issue a permit to install for a source which violates federal law. Ohio Administrative Code (OAC) 3745-31-05(A) states in part "The director shall issue a permit to install...if he determines that the installation...will...Not result in a violation of any applicable laws, including but not limited to:". The rule goes on to list the Clean Air Act and the Appendix S of Part 51. This rule is unambiguous. Ohio EPA must comply with federal statutes in the issuance of a Permit to Install.

U.S. EPA had expressed a concern about certain items that were identified in the Clean Air Act as part of the review of new sources which were not identified in either state or federal rules. Ohio EPA proposed a policy that includes these additional federal requirements. The policy was issued in proposed format and a public hearing was held on the document. After a review of the comments, Ohio EPA submitted that policy as part of the State Implementation Plan. No mention of this is made in the proposed disapproval. The current approach at Ohio EPA has been successful for the past twenty years in the review of new sources. With the

current regulatory structure, Ohio EPA can modify the requirements for the approval of new sources as soon as the new requirements are issued. If Ohio EPA must incorporate all of the various federal rules, sources in Ohio would need to wait until Ohio EPA changes the rules to receive the benefit of the new standards.

USEPA Comment: *... generally regulations are necessary to define the precise obligations of affected individuals and the precise criteria by which relevant decisions (e.g determinations of compliance) will be made. The proper adoption of clearly defined criteria for making relevant decisions is essential to support these decisions. Therefore, in the absence of exhaustively detailed statutes, the adoption of detailed regulations is essential for successful program implementation.*

Response: It is our belief that the existing statutes, and existing regulations are of sufficient detail to precisely define the requirements that must be met. The Clean Air Act Amendments of 1990 are clearly the most detailed of any of the past amendments. For instance, the offset ratios defined in the CAAA precisely define the minimum ratios required in each non attainment area. Any regulations which we would promulgate would simply mirror those ratios. Why have those requirements listed in two areas (the CAAA and Ohio rules) when we already have the legal authority to enforce the CAAA?

USEPA Comment: *... the statement of permitting criteria lacks the specificity, the regulatory standing, and the assurance of being enforceable that are needed to satisfy the Clean Air Act requirements.*

Response: The requirements of the CAAA are clearly enforceable via existing Ohio regulations.

USEPA's Summary: *USEPA's review indicates that Ohio's submittal does not clearly establish the specific criteria by which judgements in new source permitting will be made. Furthermore, by relying not on properly adopted regulations but rather on a general regulatory provision (requiring compliance with the Clean Air Act) in conjunction with a statement of permitting criteria, the State has failed to follow proper procedures to become authorized to impose specific, detailed permit conditions in accordance with the Clean Air Act requirements. In addition, the existing regulations exempt two types of sources which may not be exempted under applicable USEPA regulations.*

Response: USEPA has the opportunity to approve a new source review SIP that provides for full compliance with the Clean Air Act. Instead, USEPA is proposing to disapprove a workable plan and instead force the state to adopt a large number

of rules that will only mimic the federal law. This is not the case of a state failing to enforce the federal requirements. Quite the contrary, instead, Ohio can immediately enforce federal requirements. Instead of proposing to disapprove the Ohio SIP, USEPA should be using the Ohio EPA rules as a model of efficiency for other states.

MH/

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Mike 14

June 2, 1994

CC: Jim Braun
Thisty Parsons
Alan Lloyd

William L. MacDowell
U.S. Environmental Protection Agency
Air & Radiation Division (AE-17)
Region V
77 West Jackson Blvd.
Chicago, Illinois 60604

Re: Proposed Disapproval of Ohio Part D New Source Review Submittal-59 F.R. 10349-52 (March 4, 1994)

Dear Mr. MacDowell:

The following comments are submitted by the Ohio Chamber of Commerce on behalf of its 3,800 member businesses in response to U.S. EPA's proposed disapproval of Ohio's plan to implement the nonattainment new source review (NSR) requirements added by the Clean Air Act Amendments of 1990. U.S. EPA's proposed disapproval was published in the Federal Register on March 4, 1994, 59 F.R. at 10349-52. We respectfully submit that U.S. EPA should approve rather than disapprove Ohio's program for preconstruction review and permitting of proposed major new and modified sources to be located in nonattainment areas.

One reason given for U.S. EPA's proposed disapproval of Ohio's NSR submittal is that Ohio's "statement of permitting criteria does not provide adequate specificity and clarity of criteria by which detailed implementation decisions would be made." 59 F.R. at 10340, col. 3. The Ohio submittal, however, incorporates the exact same "specificity and clarity of criteria" as federal law. See OAC 3745-31-05(A) (no permit to install can be issued unless it complies with all applicable requirements of the Clean Air Act and regulations adopted thereunder). If "specificity and clarity of criteria" were lacking, it would be a federal law, not an Ohio law, problem, but in fact it is not a problem at all. In reality, federal law is sufficiently specific and clear to make implementation decisions in this regard. In any event, lack of specificity or clarity of criteria for decision making is not a valid basis for disapproval of a State submission that on its face meets all the requirements of federal law.

The other vague reason given for U.S. EPA's proposed disapproval of Ohio's NSR submittal is a philosophical one, that Ohio is relying upon "existing Ohio statutes and regulation which already require that the provisions of the amended Clean Air Act be met" rather than adopting new, more specific regulations. 59 F.R. at 10351, col.2. Ohio's obligation, however is to implement the requirements of the

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Columbus

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ALLEN C. WADDLE
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National City Corporation
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ANDREW E. DOEHREL
Ohio Chamber of Commerce
Columbus

Chairman-Elect
R. EMMETT BOYLE
President, Chairman & CEO
Ormet Corporation
Hannibal

Clean Air Act. U.S. EPA acknowledges that Ohio's Part D NSR submittal does so:

> Ohio notes that its Rule 3745-31-05 requires that permits to install shall be issued only if the construction and operation will "not result in a violation of any applicable laws," which is defined to include the Clean Air Act including any amendments. 59 F.R. at 10341, col.2.

It is not Ohio's obligation to provide some abstract degree of specificity where, as here, Ohio's submission includes enforceable regulations that clearly incorporate each and every applicable requirement of federal law.

U.S. EPA has threatened to impose sanctions pursuant to section 179(b) of the Clean Air Act (highway funding restrictions and a requirement for two-for-one offsets) if the proposed disapproval of Ohio's Part D NSR submittal is finalized. This threat of sanctions is totally inappropriate where, as here, Ohio's submittal meets the requirements of federal law and the proposed disapproval is based upon a difference of philosophy that is extraneous to the approval criteria in the Clean Air Act.

For the foregoing reasons, we urge U.S. EPA's prompt approval of Ohio's August 20, 1993 Part D NSR submittal.

Sincerely,

Kelly R. Kinder
Director of Energy and Environment

cc: Ohio Congressional Delegation
Governor George V. Voinovich
Donald Schregardus, Director, Ohio EPA
Robert Hodanbosi, Ohio EPA

4. Label claims "for prevention of" or "to prevent" should be replaced with "as an aid in the control of" or, "to aid in the control of."

5. Labeling should carry a warning pertaining to the development of resistant organisms.

6. Dosage levels recommended in the labeling are low.

FDA concurs with the NAS/NRC DESI evaluation.

The NAS/NRC evaluation concerns the drug's safety and effectiveness to the treated animal. It does not concern the safety for food use of treated animals.

Veterinary Service, Inc., filed a supplement which reflected compliance with the results of the NAS/NRC DESI review and FDA's conclusions based on that review.

Veterinary Service, Inc., filed an additional supplement to revise the tolerances for residues of streptomycin in the uncooked, edible tissues of chickens, swine, and calves to 2.0 ppm in kidney and 0.5 ppm in all other tissues. The current tolerance of zero is an outmoded expression of an intent to regulate residues at the sensitivity of the existing analytical method. The revised tolerances are supported by available toxicological data relating to streptomycin.

The supplements are approved as of August 5, 1993, and the regulations are amended in 21 CFR 520.2158a and 21 CFR 556.610 to reflect the approvals. The basis for approval is discussed in the freedom of information summary.

In accordance with the freedom of information provisions of part 20 (21 CFR part 20) and § 514.11(e)(2)(ii) (21 CFR 514.11(e)(2)(ii)), a summary of safety and effectiveness data and information submitted to support approval of this application may be seen in the Dockets Management Branch (HFA-305), Food and Drug Administration, rm. 1-23, 12420 Parklawn Dr., Rockville, MD 20857, between 9 a.m. and 4 p.m., Monday through Friday.

Under section 512(c)(2)(F)(iii) of the Federal Food, Drug, and Cosmetic Act (21 U.S.C. 360b(c)(2)(F)(iii)), these approvals do not qualify for an exclusivity period because the supplements do not contain reports of new clinical or field investigations (other than bioequivalence or residue studies) and, in the case of food-producing animals, human food safety studies (other than bioequivalence or residue studies) essential to approval of the supplements and conducted or sponsored by the applicant.

The agency has carefully considered the potential environmental effects of this action. FDA has concluded that the action will not have a significant impact on the human environment, and that an environmental impact statement is not required. The agency's finding of no significant impact and the evidence supporting that finding, contained in an environmental assessment, may be seen in the Dockets Management Branch (address above) between 9 a.m. and 4 p.m., Monday through Friday.

List of Subjects

21 CFR Part 520

Animal drugs.

21 CFR Part 556

Animal drugs, Foods.

Therefore, under the Federal Food, Drug, and Cosmetic Act and under authority delegated to the Commissioner of Food and Drugs and redelegated to the Center for Veterinary Medicine, 21 CFR parts 520 and 556 are amended as follows:

PART 520—ORAL DOSAGE FORM NEW ANIMAL DRUGS

1. The authority citation for 21 CFR part 520 continues to read as follows:

Authority: Sec. 512 of the Federal Food, Drug, and Cosmetic Act (21 U.S.C. 360b).

2. Section 520.2158a is amended by removing paragraph (d)(3), and by revising paragraphs (d)(1) and (d)(2) to read as follows:

§ 520.2158a Streptomycin sulfate oral solution.

* * * * *

(d) * * *

(1) *Calves and swine*—(i) *Amount.* 10 to 15 milligrams per pound (mg/pound) of body weight (1.0 to 1.5 grams per gallon).

(ii) *Indications for use.* Treatment of bacterial enteritis caused by *Escherichia coli* and *Salmonella* spp. susceptible to streptomycin.

(iii) *Limitations.* Calves: Do not administer for more than 5 days. Swine: Do not administer for more than 4 days. Prepare fresh solution daily. Calves: Withdraw 2 days before slaughter. As sole source of streptomycin. Warning: Certain strains of bacteria may develop a tolerance for streptomycin. Consult a veterinarian or animal pathologist for diagnosis.

(2) *Chickens*—(i) *Amount.* 10 to 15 mg/pound of body weight (0.6 to 0.9 grams per gallon).

(ii) *Indications for use.* Treatment of nonspecific infectious enteritis caused by organisms susceptible to streptomycin.

(iii) *Limitations.* Chickens: Do not administer for more than 5 days. Withdraw 4 days before slaughter. Do not administer to chickens producing eggs for human consumption. Prepare fresh solution daily. As sole source of streptomycin. Warning: Certain strains of bacteria may develop a tolerance for streptomycin. Consult a veterinarian or animal pathologist for diagnosis.

PART 556—TOLERANCES FOR RESIDUES OF NEW ANIMAL DRUGS IN FOOD

3. The authority citation for 21 CFR part 556 continues to read as follows:

Authority: Secs. 402, 512, 701 of the Federal Food, Drug, and Cosmetic Act (21 U.S.C. 342, 360b, 371).

4. Section 556.610 is revised to read as follows:

§ 556.610 Streptomycin.

Tolerances are established for residues of streptomycin in uncooked, edible tissues of chickens, swine, and calves of 2.0 parts per million (ppm) in kidney and 0.5 ppm in other tissues.

Dated: August 31, 1993.

Robert C. Livingston,

Director, Office of New Animal Drug Evaluation, Center for Veterinary Medicine.

[FR Doc. 93-21797 Filed 9-7-93; 8:45 am]

BILLING CODE 4160-01-F

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[OH4-1-5062; FRL-4701-2]

Approval and Promulgation of Air Quality Implementation Plans; Ohio

AGENCY: U.S. Environmental Protection Agency (U.S. EPA).

ACTION: Final rulemaking.

SUMMARY: U.S. EPA is today announcing limited approval of a revision to the Ohio New Source Review (NSR) State Implementation Plan (SIP). This approval relates to the State's revised NSR regulations, which were developed to satisfy U.S. EPA's earlier conditional approval of Ohio's Part D NSR Program.

U.S. EPA's action is based upon a revision request which was submitted to satisfy the requirements of Part D of the Clean Air Act (CAA). As a result of this action, the original condition of approval of the State's NSR program at 40 CFR 52.1879(e) is removed.

U.S. EPA has evaluated the proposed revision to the plan and is granting limited approval under Sections 110(k)(3) and 301(a) of the Clean Air Act, as amended in 1990. Even though there are two new deficiencies relating to offsets requirements in the plan, U.S.

EPA is approving the plan because it is substantially better than the underlying October 31, 1980, Ohio NSR plan.

EFFECTIVE DATES: This action will be effective November 8, 1993, unless notice is received by October 8, 1993, that someone wishes to submit adverse or critical comments. If the effective date is delayed, timely notice will be published in the Federal Register.

ADDRESSES: Copies of the SIP revision, and other materials relating to this rulemaking are available for inspection at the following address: (It is recommended that you telephone Maggie Greene, at (312) 886-6088, before visiting the Region 5 Office.) U.S. Environmental Protection Agency, Air Enforcement Branch, 77 W. Jackson Boulevard, Chicago, Illinois 60604.

Written comments should be sent to: William L. MacDowell, Chief, Regulation Development Section, Air Enforcement Branch (AE-17J), U.S. Environmental Protection Agency, 77 W. Jackson Boulevard, Chicago, Illinois 60604.

Copies of this revision to the Ohio SIP are available for inspection at: U.S. Environmental Protection Agency, Jerry Kurtzweg (ANR-443), 401 M Street SW., Washington, DC 20460.

FOR FURTHER INFORMATION CONTACT: Maggie Greene, Regulation Development Section, Air Enforcement Branch (AE-17J), U.S. Environmental Protection Agency, Region 5, Chicago, Illinois 60604, (312) 886-6088.

SUPPLEMENTARY INFORMATION: In 1977 the Clean Air Act was amended to address, *inter alia*, the continued nonattainment of the National Ambient Air Quality Standards (NAAQS) found in certain areas of the United States. Part D of the Act set forth the SIP requirements for nonattainment areas. Part D includes Section 173, which governs the review and issuance of construction permits for new and modified sources in nonattainment areas. The Clean Air Act Amendments of 1990 also require the States to revise their SIPs to provide approvable nonattainment area New Source Review plans. Requirements for approvable Part D SIPs are described in a "General Preamble for Part D rulemakings published at 44 FR 20372 (April 4, 1979), 44 FR 38583 (July 2, 1979), 44 FR 50371 (August 28, 1979), 44 FR 53761 (September 17, 1979), and 44 FR 67182 (November 23, 1979). The requirements for SIP revisions mandated by the Clean Air Act Amendments of 1990 are set forth in the "General Preamble for the Implementation of Title I of the Clean Air Act Amendments of 1990," 57 FR 13498 (April 16, 1992) and 57 FR 18070 (April 28, 1992), Appendix D.

On July 25, 1980, and September 25, 1980, Ohio submitted its NSR plan designed to meet the requirements of Part D. After review and public comment, U.S. EPA conditionally approved this plan on October 31, 1980 (codification corrected on December 17, 1980 at 45 FR 82927). (For more detail on "conditional approvals" see 44 FR 38583 (July 2, 1979) and 44 FR 67182 (November 23, 1979).) The conditional approval (40 CFR 52.1879(a)) required the State to submit a Part D NSR plan which refined the criteria under which permits were to be issued and assured that the requirements of Section 172 (b)(11) (Section 173(a)(5) of the 1990 Amendments enacted on November 15, 1990) and Section 173 were met.

On October 4, 1982, and January 24, 1983, the Ohio Environmental Protection Agency (OEPA) submitted revisions to the Ohio Administrative Code (OAC), Rules 3745-31-01 through 3745-31-08, to satisfy the October 31, 1980, conditional approval of Ohio's Part D NSR plan. Additional clarification was submitted on June 30, 1987, and October 28, 1987. Ohio's revised NSR rule essentially incorporates the Federal NSR provisions at 40 CFR Part 51, Appendix S, as the Ohio NSR plan. The Ohio Rule meets the requirements of U.S. EPA's conditional approval of Ohio's earlier Part D NSR plan for all source categories in Ohio, except for temporary emission sources and resource recovery facilities.

Two provisions of Ohio's NSR plan (OAC Rule 3745-31-01 (H)(1)(b) and (M)) are not required by U.S. EPA's NSR rules, and they are not included as part of this SIP revision. Also, the current Appendix S differs from Ohio's original Part D NSR plan in that it uses a "plantwide" definition of source which U.S. EPA approves without restriction.[1]

Prior to the passage of the Clean Air Act, U.S. EPA imposed certain restrictions on the adoption of a plantwide definition of source for nonattainment areas with an inadequate SIP. See J. Potter, "Plantwide Definition of Major Stationary Sources for Air Pollution" (February 27, 1987). However, with passage of the Clean Air Act Amendments of 1990, Congress has mandated a new set of attainment strategies and given areas new deadlines to eliminate NAAQS violations. In addition, while the existence of U.S. EPA's plantwide definition was well known by 1990, nothing in the Clean Air Act Amendments overturns U.S. EPA's position on this issue. To the contrary, several new nonattainment provisions employ a plantwide source definition. See, *e.g.*, CAA section 182(c)(6). For this reason, U.S. EPA finds that the Ohio plantwide source definition may be approved without any restrictions.

U.S. EPA evaluated Ohio's revised plan with respect to the Agency's Part D NSR policy applicable at that time and found that the plan was approvable. Since the State had yet to submit and receive approval of an attainment demonstration for the relevant areas, U.S. EPA did not rely on any reductions from the operation of the new NSR programs in an approved attainment demonstration[2]. This rulemaking includes approval of a plantwide definition of source for Ohio in accordance with U.S. EPA's 1987 action, inasmuch as the State has shown that it is making and will continue to make

[1] On October 14, 1987, the U.S. EPA revised the NSR regulations in 40 CFR part 51 to give States the option of adopting the "plantwide" definition of stationary source in nonattainment areas (46 FR 50766). This definition provides that only physical or operational changes that result in a net increase in emissions at the entire plant require a NSR permit. For example, if a plant increases emissions at one piece of process equipment but reduced emissions by the same amount at another piece of process equipment at the plant, then there would be no net increase in emissions at the plant and therefore no "modification" to the "source." The plantwide definition is in contrast to the so-called "dual" definition (or a definitional construction like that in the 1979 offset ruling (44 FR 3274) which has much the same effect as the dual definition): under the dual definition, the emissions increases from physical or operational changes at an individual piece of process equipment are caused without regard to offsetting reductions elsewhere at the plant.

In the October 14, 1987, Federal Register notice, U.S. EPA set forth its rationale for allowing use of the plantwide definition (46 FR 50766-69). In the Agency's view, allowing use of the plantwide definition was a reasonable accommodation of the conflicting goals of Part D of the Act: reasonable further progress (RFP) and timely attainment of the NAAQS versus maximum State flexibility and economic growth.

In 1984, the Supreme Court upheld U.S. EPA's position as a reasonable accommodation of the conflicting purposes of Part D of the Act within U.S. EPA's broad discretion. *Chevron U.S.A., Inc. v. NRDC, Inc.*, 467 U.S. 837. Specifically, the Court agreed that the plantwide definition is fully consistent with the Act's goal of maximizing State flexibility and allowing reasonable economic growth. Likewise, the Court recognized that U.S. EPA had advanced a reasonable explanation for its conclusion that the plantwide definition serves the Act's environmental objectives as well. 467 U.S. at 863.

[2] U.S. EPA ruled that a State wishing to accept a plantwide definition generally has complete discretion to do so, and it set only one restriction on that discretion. If a State had specifically projected emission reductions from its NSR program as a result of a dual or similar definition and had relied on those reductions in an attainment strategy that U.S. EPA later approved, then the State needed to revise its attainment strategy as necessary to accommodate reduced NSR permitting under the plantwide definition (46 FR 50767 Col. 2, 50769 Col. 1).

reasonable efforts to adopt and submit the necessary additional SIP revisions.

U.S. EPA reevaluated Ohio's rule in relationship to the current 40 CFR part 51 Subpart I (formerly 40 CFR 51.18). As stated before, Ohio's NSR rule essentially incorporates the Federal NSR provisions in 40 CFR part 51, Appendix S. However, U.S. EPA has determined that Appendix S as incorporated by Ohio is deficient with respect to certain of the requirements in Subpart I and the current requirements of the Clean Air Act. U.S. EPA's review of the Ohio NSR regulation's effectiveness identified the following regulation deficiencies:

1. Appendix S exempts for resource recovery facilities from offset requirements, whereas Section 173 of the Clean Air Act and 40 CFR 51.165 do not provide for such exemption.

2. Appendix S exempts temporary sources from obtaining offsets, whereas Section 173 of the Clean Air Act and 40 CFR 51.165 do not provide for such an exemption.

In addition, it should be pointed out that Appendix S as proposed by Ohio is not as explicit as the current regulations in Subpart I (or the underlying statutory provisions of Part D of the Clean Air Act) in requiring that emissions offsets meet Reasonable Further Progress (RFP) requirements by providing actual emissions reductions. Section IV.C. of Appendix S, as amended in 1979 (44 FR 3274), explicitly requires offsets only on a short-term (i.e., pounds per hour) basis, although it also provides for annual offsets (expressed, e.g., in tons per year) "if necessary to carry out the intent of this Ruling."

However, the current U.S. EPA regulations governing approval of NSR programs, which were adopted in 1980, require that emission offsets necessary to demonstrate RFP be based in all cases on "actual emissions." See 40 CFR 51.165 (a)(3)(i)((A), 51.165 (a)(xii)(B) (45 FR 52676). Accordingly, it is U.S. EPA's position that in those areas which have still not attained the NAAQS despite the passage of the statutory deadline, the overall intent of Appendix S, to insure that major new sources and major modifications result in RFP, cannot be satisfactorily met unless all such sources obtain federally enforceable actual offsets as necessary to provide annual emission reductions as required by current U.S. EPA regulations. Thus, U.S. EPA interprets Appendix S, Section IV.B. to require, in all instances, that federally enforceable actual emissions offsets be obtained as a condition of any permit purporting to satisfy the requirements of Part D of the Act. This interpretation is hereby made an express part of today's approval of Ohio's NSR SIP, which must be met by all permits issued by Ohio pursuant to U.S. EPA's approval of the State's NSR program.

The Clean Air Act Amendments of 1990 impose additional NSR requirements for certain types of nonattainment areas. These changes include for example, in ozone nonattainment areas, decreased source thresholds and increased offset ratios and the extension of NSR requirements to certain Nitrogen Oxides sources. See Sections 182(a)-(f). The SIP changes submitted by Ohio and approved today were submitted prior to the passage of the Clean Air Act Amendments of 1990 and were not intended to satisfy the Amendments' new NSR requirements. For this reason, today's approval of Ohio's NSR SIP does not relieve Ohio of its responsibility to submit additional nonattainment NSR SIP revisions in accordance with the deadlines Congress established in Title I of the Act.

Final Action: U.S. EPA is today granting limited approval of the revision to Ohio's NSR SIP. U.S. EPA is approving the revision to the regulations in the SIP because the revised regulations are a substantial enhancement of the existing SIP. However, the approval is "limited" in the sense that U.S. EPA is not granting full approval of the NSR SIP as meeting Part D requirements. Ohio's NSR regulations are deficient, in that they exempt resource recovery facilities and temporary sources from offset requirements. Nevertheless, U.S. EPA is not today taking action to disapprove Ohio's NSR SIP. Ohio has made a submittal with respect to NSR regulations to meet the requirements of the Clean Air Act Amendments of 1990 (CAAA). That submittal is under review. U.S. EPA will require that any regulations intended to satisfy those CAAA requirements shall also address the deficiencies identified here. Therefore, U.S. EPA intends to complete action on the approvability of Ohio's NSR SIP when it takes action on the NSR regulations submitted to satisfy the 1990 CAAA requirements.

Because U.S. EPA considers today's action noncontroversial and routine, we are approving it today without prior proposal. The action will become effective on November 8, 1993. However, if we receive notice by October 8, 1993, that someone wishes to submit critical comments, then U.S. EPA will publish: (1) A notice that withdraws the action, and (2) a notice that begins a new rulemaking by proposing the action and establishing a comment period.

Nothing in this action should be construed as permitting, allowing or establishing a precedent for any future request for revision to any SIP. Each request for revision to the SIP shall be considered separately in light of specific technical, economic, and environmental factors and in relation to relevant statutory and regulatory requirements.

Under the Regulatory Flexibility Act, 5 U.S.C. Section 600 et. seq., U.S. EPA must prepare a regulatory flexibility analysis assessing the impact of any proposed or final rule on small entities. 5 U.S.C. 603 and 604. Alternatively, U.S. EPA may certify that the rule will not have a significant impact on a substantial number of small entities. Small entities include small businesses, small not-for-profit enterprises, and government entities with jurisdiction over populations of less than 50,000.

SIP approvals under Sections 110 and 103, and subchapter I, Part D of the CAA do not create any new requirements, but simply approve requirements that the State is already imposing. Therefore, because the Federal SIP-approval does not impose any new requirements, I certify that it does not have a significant impact on any small entities affected. Moreover, due to the nature of the Federal-State relationship under the CAA, preparation of a regulatory flexibility analysis would constitute Federal inquiry into the economic reasonableness of a State action. The CAA forbids U.S. EPA to base its actions concerning SIPs on such grounds. *Union Electric Co.* v. *U.S. EPA.*, 427 U.S. 246, 256–66 (S. Ct. 1976); 42 U.S.C. 7410(a)(2).

U.S. EPA has reviewed this request for revision of the SIP for conformance with the provisions of the 1990 Amendments enacted on November 15, 1990. These Amendments require extensive changes to nonattainment SIPs for new source permitting. The Agency has set forth the new NSR requirements in the General Preamble to Title I and is preparing a rulemaking incorporating these requirements into Federal regulations. As has been discussed, U.S. EPA's actions today do not in any way relieve Ohio of the new requirements for NSR SIP submittals imposed by the 1990 Amendments.

The Office of Management and Budget has exempted this rule from the requirements of Section 3 of Executive Order 12291.

Under Section 307(b)(1) of the Clean Air Act, petitions for judicial review of this action must be filed in the United States Court of Appeals for the appropriate circuit by November 8, 1993. Filing a petition for reconsideration by the Administrator of this final rule does not affect the finality of this rule for the purposes of judicial

review nor does it extend the time within which a petition for judicial review may be filed, and shall not postpone the effectiveness of such rule or action. This action may not be challenged later in proceedings to enforce its requirements (see Section 307(b)(2)).

List of Subjects in 40 CFR Part 52

Air pollution control, Environmental protection, Incorporation by reference, Ozone, Sulfur oxides, Nitrogen dioxide, Lead, Particulate matter, Carbon monoxide, Hydrocarbons.

Note: Incorporation by reference of the State Implementation Plan for the State of Ohio was approved by the Director of the Federal Register on July 1, 1982.

Dated: August 24, 1993.

Carol M. Browner,

Administrator.

Part 52, chapter I, title 40 of the Code of Federal Regulations is amended as follows:

PART 52—APPROVAL AND PROMULGATION OF IMPLEMENTATION PLANS

1. The authority citation for part 52 continues to read as follows:

Authority: 42 U.S.C. 7401–7671q.

2. Section 52.1870 is amended by adding paragraph (c)(83) to read as follows:

§ 52.1870 Identification of plan.

* * * * *

(c) * * *

(83) On October 4, 1982, and January 24, 1983, the Ohio Environmental Protection Agency (OEPA) submitted revisions to the Ohio Administrative Code (OAC) Chapter 3745–31–01 through 3745–31–08 to satisfy the New Source Review conditional approval of October 31, 1980 (45 FR 72119). U.S. EPA is granting limited approval of the revision to Ohio's New Source Review State Implementation Plan (SIP) because the revised regulations strengthen the SIP.

(i) Incorporation by reference.

(A) OAC Rule 3745–31 through 3745–31–03—Permits to Install New Sources of Pollution (Adopted June 30, 1982, effective August 15, 1982), as found in the State of Ohio Environmental Protection Agency Laws and Regulations.

(ii) Additional material.

(A) A June 30, 1987, letter from OEPA certified that the State did not rely upon additional reductions through the offset policy to attain or maintain the National Ambient Air Quality Standards.

§ 52.1879 [Amended]

3. Section 52.1879 is amended by removing paragraph (e).

[FR Doc. 93–21783 Filed 9–7–93; 8:45 am]

BILLING CODE 6560–50–P

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40 CFR Part 180

[OPP–300252A; FRL–4628–8]

RIN No. 2070–AB78

Acetic Acid and Sodium Diacetate; Revocation of Tolerances

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: This document revokes the exemptions from the requirement of a tolerance for residues resulting from postharvest use as a fungicide, as follows: (1) all raw agricultural commodities (RACs) listed in 40 CFR 180.1029 for residues of acetic acid; and (2) certain RACs listed in 40 CFR 180.1058 for residues of sodium diacetate. EPA is initiating this action because all registered uses of acetic acid and sodium diacetate on these commodities have been canceled.

EFFECTIVE DATE: This regulation becomes effective September 8, 1993.

ADDRESSES: Written objections, identified by document control number, [OPP-300252A], may be submitted to: Hearing Clerk (A-110), Environmental Protection Agency, Rm. 3708, 401 M St., SW., Washington, DC 20460.

FOR FURTHER INFORMATION CONTACT: By mail: Jim Downing, Registration Division (H-7505W), Environmental Protection Agency, 401 M St., SW., Washington, DC 20460. Office location and telephone number: 6th Floor, Crystal Station I, 2800 Crystal Drive, Arlington, VA 22202, (703)-308-8319.

SUPPLEMENTARY INFORMATION: EPA issued a proposed rule in the Federal Register of August 12, 1992 (57 FR 36046), which proposed revoking exemptions from the requirement of a tolerance established under section 408 of the Federal Food, Drug, and Cosmetic Act (FFDCA), 21 U.S.C. 346a, for residues of acetic acid and sodium diacetate resulting from postharvest use of these chemicals as fungicides, as follows: (1) acetic acid in or on the RACs alfalfa, barley grain, Bermuda grass, bluegrass, brome grass, clover, corn grain, cowpea hay, fescue hay, lespedeza, lupines, oat grain, orchard grass, peanut hay, peavine hay, rye grass, sorghum grain, soybean hay, sudan grass, timothy, vetch hay, and wheat grain listed in 40 CFR 180.1029; and (2) sodium diacetate in or on the RACs barley grain, cowpea hay, fescue hay, lespedeza hay, lupines, peanut hay, peavine hay, soybean hay, vetch hay, and wheat grain listed in 40 CFR 180.1058.

EPA's decision to revoke these exemptions from the requirement of a tolerance for acetic acid and sodium diacetate was based on the fact that before February 1991, all registrations under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) of pesticide products ingredients that were registered for these uses on food or animal feed commodities were canceled. In the case of acetic acid these registrations were canceled for failure by affected registrants to respond to a January 1987 generic data call-in, and also for nonpayment of required annual pesticide registration maintenance fees. In the case of sodium diacetate, these registrations were canceled for nonpayment of required annual pesticide registration maintenance fees.

No significant comments or requests for referral to an advisory committee were received in response to the proposed rule.

Therefore, based on the information considered by EPA and discussed in detail in the August 12, 1992 proposal and in this final rule, EPA is hereby revoking the exemptions from the requirement of a tolerance listed in 40 CFR 180.1029 for acetic acid since acetic acid is no longer registered in the U.S. as a pesticide-active ingredient for use on any food or animal feed commodities. EPA is hereby revoking the exemptions from the requirement of a tolerance listed in 40 CFR 180.1058 for sodium diacetate since sodium diacetate also is no longer registered as an active ingredient for use on any food or animal feed commodities, except alfalfa, clover, field corn, grasses, oats sorghum, and timothy.

The registered postharvest applications of acetic acid and sodium diacetate to livestock feed crops were primarily within farm facilities so there was limited environmental exposure. Exposure to aquatic environments from runoff would have resulted only in short-term pH changes that would have been counteracted by the natural buffering capacity of the water. Thus, there is no anticipation of a residue problem due to environmental contamination. Consequently, no action levels will be recommended to replace the acetic acid and sodium diacetate exemptions upon their revocation.

Any person adversely affected by this regulation may, within 30 days after publication of this document in the Federal Register, file written objections

From: Tom Rigo
To: Cesar Zapata; CURT MARSHALL; Dale Aleman; Dennis Bush; Don Waltermeyer; Frank J. Markunas; Frank.Stoy@does.hamilton-co.org; Fred Klingelhafer; Harry.Schwietering@does.hamilton-co.org; Isaac Robinson; John Curtin; Karen Granata; Mark Vilem; Michael.Kramer@does.hamilton-co.org; Mike Riggleman; Phil Hinrichs; Phillip_thompson@epa.ohio.gov; Ron Hancher; Samir Araj; Tim Wilson
Date: 4/6/00 8:02AM
Subject: Title V Transitional Minor Sources Guidance - IMPORTANT !!!

A common question is raised with respect to transitional sources that I provided the answer and request that you distribute this question and answer to all your permit review staff.

Question: Do all the Title V transitional minor sources (facilities with potential to emit above the Title V major threshold but the actual emissions for the pollutants for which they are major are greater than or equal to 20% of the major threshold but less than 50% of the threshold) have to be issued a FESOP permit by December 31, 2000?

Answer: It depends on when the transition facility applied for a FESOP permit. If the DO/LAA received the FESOP application on or before the federal Title V permit application filing deadline September 29, 1996, then the transitional facility can continue to lawfully operate under the Title V application shield until the FESOP permit has been issued. If the transition facility did not apply by the federal deadline, then it is necessary to have the FESOP permit **issued final** by the transitional policy deadline of December 31, 2000 in order for the source to continue to lawfully operate.

Please feel free to contact me, should you have any questions. Thanks. Tom

CC: Bob Hodanbosi ; Cindy Dewulf ; Jeanne Mallett; Jim Orlemann ; Mike Hopkins

AQM&P Section
Permits To Install for Title 5 Synthetic Minors

We have received a few PTIs from field offices recently that have appeared to be Title 5 Synthetic Minors. They contained operating restrictions, and were marked "preliminary" on the standard terms worksheet page, which means the field office wants the PTI issued as a draft. However, some of these worksheets were not accompanied by a Synthetic Minor write-up. Others have needed minor changes to ensure that the terms are federally enforceable.

It has recently been established that the procedure for making a source minor for Title 5 purposes through the PTI process includes three main things:

Synthetic Minor write-up is needed
The PTI must be issued draft
The PTI must have federally enforceable conditions

These federally enforceable conditions are typically the same as those that have been used in Synthetic Minor PTIs in recent years.

In addition, the normal method for making a source a Title 5 minor is now through the state PTO. If you receive a PTI application to restrict potential emissions, you can go ahead and process it. However, you should be advising companies that any future requests should be done through the PTI process. Of course, a PTI should be used for any new source. Please keep this in mind when a facility wants to be a Title 5 minor.

If any of the District or Local staff have questions about these new procedures, please contact one of the Central Office PTI review staff. Thanks for your cooperation.

February 3, 1997

Robert Hodanbosi, Chief
Division of Air Pollution Control
Ohio Environmental Protection Agency
1800 WaterMark Drive
Columbus, Ohio 43215

Dear Mr. Hodanbosi:

This letter is in follow-up to the conference call between our offices on December 18, 1996 in which we discussed questions your office had regarding Title V and other permitting issues. We hope that this letter clarifies these issues and provides you with the necessary support to continue the Title V implementation process.

You asked whether visible emission limits for stacks and fugitive dust are federally enforceable. Rule 3745-17-07 of the Ohio Administrative Code (OAC) sets those limitations. USEPA approved this rule on May 27, 1994 at 59 FR 27464. The rule, as part of the State Implementation Plan (SIP), provides for the implementation, maintenance, and enforcement of National Ambient Air Quality Standards (NAAQS), and is therefore federally enforceable. As federal requirements, these limits must be included in the state/federal portion of the Title V permit. The start-up and shutdown temperatures for electrostatic precipitators (ESPs) and baghouses at which certain facilities may be exempted from the opacity limits are the same in both the OAC and in the SIP. Opacity limits are not meant as a backup for mass emission limits; like mass emission limits, they are individually enforceable.

You brought to our attention that some sources have proposed that periodic emission testing done every two and a half to five years is sufficient to fulfill the requirement for a monitoring program in an operating permit. As stated in the January 10, 1997 letter from Region 5 to your office, 40 CFR 70.6(a)(3) specifies the standard monitoring and related record keeping and reporting requirements that each Title V permit must contain. The letter states that this rule, known as the gap-filling provision, requires each permit to contain periodic monitoring sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the permit, if the underlying applicable requirements do not otherwise specify such monitoring. Therefore, if the underlying applicable requirements, such as construction permit conditions or SIP requirements, do not contain adequate monitoring, record keeping, and reporting provisions sufficient to provide such reliable data, the State must add such provisions in the Title V permit, and these provisions must be located in the federally enforceable section of the permit. Emission testing performed every few years does not yield adequate data to represent the source's ongoing compliance with the permit, and is therefore not an acceptable monitoring program. The Compliance Assurance Monitoring (CAM) rule that is under consideration may set the guidelines for major sources and some non-major sources, but Section 70.6(a)(3) exists independent of that rule as a Title V program requirement.

You asked how the Phase I acid rain provisions should be handled within Title V permits. It would be sufficient to reference the Phase I permit in the General Terms and Conditions section of the Title V permit. The following language is an example of how the Phase I permit can be referenced: "This unit is also subject to an EPA-issued Phase I permit effective through December 31, 1999. The acid rain requirements specified in this permit are in addition to, and do not supersede, those set forth in the Phase I permit."

Finally, you asked whether conditions in an OEPA construction permit that were meant to be only state-enforceable can be segregated from the section of a Title V permit that is both federally and state-enforceable. The Ohio SIP provides that all conditions of a construction permit are federally enforceable. However, OEPA may remove the federal enforceability from construction permit conditions with a permit revision and issue the Title V permit simultaneously, using the same public notice, if special procedures are followed. Unless construction permits clarify which of their conditions are not federally enforceable, all of the conditions will be considered to be federally enforceable except for the tons-per-year limits.

In addition, as with the tons-per-year limits, if OEPA can justify that any such specific permit conditions arise from only state-enforceable requirements, and no federal requirements, as discussed in the following paragraph, those conditions may be segregated out and placed in the state-enforceable portion of the Title V permit. A written record should be kept of such justification, and provided to USEPA with any such permit.

Segregating the enforceability of construction permit conditions in a Title V permit is allowable if the conditions being declared as only state-enforceable are: (1) not based on SIP requirements; (2) not used in the construction permit to limit the source's potential to emit (PTE) for reasons such as netting or offsets; and (3) not New Source Review (NSR) permit requirements whose applicability has expired. A statement should be added in the legal basis section of the Title V permit that clarifies that the state requirements are only state-enforceable even if they exist in the construction permit.

We appreciate your bringing your questions to us, and value our continued communication and cooperation. We are looking forward to our next conference call in February. If you have any further questions concerning these issues, please call Kaushal Gupta, of my staff, at (312) 886-6803.

Sincerely yours,

/s/

Cheryl Newton, Chief
Permits and Grants Section

QUESTIONS FOR THE 12/18 CONFERENCE CALL WITH USEPA CONCERNING TITLE V PERMITTING

1. WHAT IS USEPA'S POSITION CONCERNING THE ENFORCEABILITY OF THE STACK AND FUGITIVE VISIBLE EMISSION LIMITS IN OAC RULE 3745-17-07? SHOULD THESE LIMITS BE PLACED ON THE STATE/FEDERAL OR STATE ONLY SIDE OF THE TITLE V PERMIT?

2. SOME FACILITIES HAVE SERIOUSLY PROPOSED THAT THEIR PERIODIC EMISSION TESTING (ONCE EVERY 2.5 OR 5 YEARS) IS SUFFICIENT TO FULFILL THE REQUIREMENT FOR A MONITORING PROGRAM FOR THE APPLICABLE REQUIREMENT. DOES THE USEPA VIEW PERIODIC EMISSION TESTING AS AN ACCEPTABLE "MONITORING" PROGRAM?

3. DOES THE USEPA CONSIDER THE TEMPERATURE LIMITS FOR THE STARTUP AND SHUTDOWN OF ESPs AND BAGHOUSES TO BE FEDERALLY ENFORCEABLE? ON WHICH SIDE OF THE PERMIT SHOULD THESE OPERATIONAL RESTRICTIONS BE PLACED?

4. HOW DOES USEPA EXPECT THE ACID RAIN PROVISIONS TO BE HANDLED WITHIN THE TITLE V PERMITS? IS THE REFERENCE WITHIN THE GTCs SUFFICIENT?

5. WE HAVE DETERMINED THAT TONS/YEAR LIMITS IN A DRAFT/FINAL PTI ARE NOT FEDERALLY ENFORCEABLE. ARE THERE ANY OTHER PARTS OF A DRAFT/FINAL PTI THAT THE USEPA WOULD CONSIDER TO BE NOT ENFORCEABLE?

6. AS A RESULT OF OUR MEETING LAST WEEK WITH DAVE KEE, GEORGE CZERNIAK, AND BILL MACDOWELL, WILL REGION 5 BE ISSUING ANY CLARIFYING GUIDANCE TO THE STATES CONCERNING THE NEED TO SPECIFY, IF REASONABLE, MONITORING, RECORDKEEPING, AND REPORTING (MR&R) REQUIREMENTS FOR AN "APPLICABLE REQUIREMENT" THAT DOES NOT HAVE RULE-BASED MR&R REQUIREMENTS?

legal basis section of the Title V permit that clarifies that the state requirements are only state-enforceable even if they exist in the construction permit.

We appreciate your bringing your questions to us, and value our continued communication and cooperation. We are looking forward to our next conference call in February. If you have any further questions concerning these issues, please call Kaushal Gupta, of my staff, at (312) 886-6803.

Sincerely yours,

Cheryl Newton, Chief
Permits and Grants Section

Final
May
Plan

Rich Copy to Grant Hopkins & Staff
Return original to me

Ohio EPA
Division of Air Pollution Control
Title V Permit Program Briefing

To: Distribution

From: Tom Rigo and Mike Hopkins

Date: July 27,1994 and updated December 28, 1994

The purpose of this briefing is to provide several questions asked of DAPC staff regarding the Ohio Title V program. Hopefully, this will lead to more consistent advise provided to the regulated community statewide. Should you have any questions to be addressed in future briefings, please send them to us. Also, provide what you believe is the answer to the question.

1) For applicability purposes, do you only include potential PM_{10} emissions or do you consider potential emissions for total suspended particulate (PM or TSP) to establish whether or not your facility is a 100 TPY major source for particulate?

   You are to base Title V applicability determination on TSP. TSP is a "regulated pollutant" since TSP standards have been established in the federal New Source Performance Standards.

2) Does a source operation that meets the definition of a NSPS category or NESHAP category have to include their fugitive emissions for that source operation as required by category if the source is not subject to the NSPS or NESHAP requirement (i.e., was built before the federal rule was in effect)?

   After consultation with USEPA, the source operation that is included in a definition of the NSPS or NESHAP categories is required to include fugitive emissions even though the source might not have to comply with the particular NSPS or NESHAP standard because of an applicability date, etc.

3 Does a facility that emits methane or ethane have to report these emissions as organic compounds?

   Since methane and ethane can be emitted in large quantities and are not regulated under OAC Chapter 21, DAPC has determined that it will process fee reports at this time which do not include methane and ethane emissions. Our policy may change in the future, if methane or ethane emissions standards are adopted by a future federal or State

air pollution control law or regulation

4) If an emission unit has limitations that go beyond the SIP that result from a BAT determination in a PTI, are these federally enforceable to take advantage when determining the potential to emit?

If the PTI that established a BAT beyond the SIP allowable was issued as a direct final, then the BAT is not federally enforceable and the emission unit can only take credit for control up to the SIP requirements. If the PTI was issued as a draft then final, DAPC considers those limiting conditions (operational and/or hourly emissions limits) to be federally enforceable. Note: Effective immediately, for all future PTI's, federally enforceable conditions for evaluating Title V applicability, be prepared in accordance with the current federal policy which are reflected in OAC rule 3745-35-07 as adopted on 4/4/94.

5) Can "bottlenecks" in productions, physical limitations, or seasonal operation be considered when calculating the potential to emit?

Generally, a facility can not consider these types of limitations unless they establish federally enforceable conditions in a State permit. However, potential to emit under certain circumstances can be bizarre. A strict interpretation can have extremely small air emitting facilities subject to the program. Therefore, common sense needs to be used. If a company actually emits very small quantities of emissions (less than 5 tons for any regulated non-HAP or less than a ton for any HAP, and less than 10 tons of all air emissions from the entire facility), then it is appropriate for the small emitting facility to account for physical limitations, seasonal operation, or production bottlenecks to determine its potential emissions. In the future, Ohio EPA intends to promulgate rules for these small emitting facilities which would restrict most of these entities potential to emit by rule which would clearly be federally enforceable.

6) What is the emission cap for the six month 1993 emissions reporting period?

The law provides an emissions cap of 4000 tons per year per pollutant. However, DAPC recognizes that for only the first reporting period, we have a period of only six months not twelve. Since we have this unique circumstance for this initial reporting period, DAPC has decided to evaluate these reports with an emissions cap of half the value provided in the law. Even though this decision negatively effects the

potential revenue to the Agency, we believe it is the appropriate decision given the shorter reporting period.

7) What is the appropriate method for calculating potential emissions, for VOC's and/or OC's from a coating line employing equipment such as spray guns. Since theoretically it is possible to continuously spray coating, should this be how "potential to emit" for these operations be determined?

"Potential to emit" for the purpose of determining Title V applicability for coating operations should be quantified in accordance with methods and procedures described in Engineering Guide #45. A copy of Engineering Guide #45 is available on the DAPC Bulletin Board System that you may download for reference.

Note: The acceptable procedure for quantifying potential "hazardous air pollutants" (HAP) emissions will be addressed in the near future under a separate "Interim Engineering Guide"

8) When should Ohio industry expect USEPA to approve Ohio's Title V program?

Ohio just recently (7/20/94) revised its submission of the Title V program to USEPA. Ohio believes that this revised program submission (which includes all the final approved rules and statutes) should be complete and fully approvable. As you may know Ohio's program goes into effect once full approval of the program is determined by USEPA. USEPA staff have indicated that it will take a year from the revised program submission for USEPA to review the program. If this is correct, we can expect approval of the program no earlier than July 22, 1995. Ohio EPA is working with USEPA to possibly delay the effective date of their expected full approval until the beginning of the federal fiscal year (October 1, 1995). Again as more precise dates are known this information will be made available on the DAPC Bulletin Board System. (updated 12/28/94)

9) When can Ohio industry plan to have available the "data entry module" (DEM) for the Title V permit application?

Ohio EPA is working very diligently with the contractor (American Management Systems) to complete the development of the DEM. This DEM is expected to be piloted by 8-10 companies in Spring 1995. The DEM should be available on the BBS <u>for testing purposes only</u> for anyone who wishes to pilot and provide Ohio EPA with feedback in May 1995. Once a precise schedule is known this informations will be

provided on the DAPC Bulletin Board Service. By June 1995, we plan to have the DEM available for those companies which would like to have a headstart with completing the Title V permit application. (updated 12/28/94)

Additional questions 12/28/94

The Ohio EPA is planning on requiring Title V applications to be submitted electronically. The companies preparing Title V applications need printed copies to route within their company for review. Will the Title V software allow the printing of a copy of the Title V application?

Yes. The software will have this capability to print all aspects of the Title V application including the emission category forms. The system will also print the fee emission report forms and the emission statement forms.

How should trace quantities of Hazardous Air Pollutants (HAP) be identified and quantified? For instance trace quantities (<0.1%) of HAPs are present in coating manufacturer's raw material but are not listed on any material safety data sheets (MSDS). With analytical capabilities at the ppb level, trace quantities of many HAP solvents will be in industrial grade solvents.

You should make a worse case estimate of the amount of HAPs in your coatings or material. If this estimate shows that the maximum amount of these HAPs is negligible compared to the HAPs threshold levels (10 tons/year for each HAP and 25 tons per year for combined HAPs), then that is all you have to do. You can submit the data to support you conclusion that you do not trigger the HAPs threshold.

If your evaluation of emissions shows that it is possible to exceed the threshold levels, then you should either get more information on the composition of the coatings from the supplier or you should do your own testing on the components of the coatings.

If you are a Title V facility and you have emission units with trace quantities of HAP's, these emission units would be considered insignificant for HAP's if the total potential HAP's for the emission unit is less than one ton.

12) Will maximum available control technology (MACT) early reduction commitments be applicable requirements?

Yes. These requirements are commitments made by companies to give them more time to comply with a proposed MACT

standard

13) How many tons per year can we put on a grandfathered (pre 1974 construction) reasonable available control technology (RACT) emissions unit?

Emissions units installed before 1974 are not required to obtain permits to install (unless they are modified). As such, they typically don't have ton per year limits established. Instead, they typically have a short term limit established through existing Ohio rules (RACT). The annual emissions from these emissions units are only limited by the maximum capacity of the emissions unit. This can result in very large federally enforceable potential emissions.

If your actual emissions for your facility is under the Title V thresholds, then you can avoid Title V requirements by requesting restrictions on your potential emissions. This is done by requesting the issuance of a permit which restrict your operations and thereby restricts your potential emissions. This process is called a synthetic minor permit. Instructions on how to do this are contained in separate guidance from the Ohio EPA. This guidance is available on the DAPC Bulletin Board System.

Are best available technology (BAT) requirements from Ohio EPA permits to install federally enforceable for emissions units which would otherwise be exempt under Ohio's new permits rule (e.g. throughput limits, operating hour limits, record-keeping requirements)?

The Ohio permit rules and Ohio law were modified in late-1993 and early-1994 to add many small emissions unit exemptions and de minimis exemptions. Under these exemptions, no permit to install or permit to operate is required today. However, in the past, these emissions units needed permits. BAT limits established under these permits are federally enforceable if the permit to install was issued as a draft permit. If this is true, then these limits are federally enforceable.

Note: Under these exemptions provided by Ohio law, these small emission units emissions must be counted towards Title V applicability. Also, if you are a Title V facility, these exempt emission units must be listed as insignificant activities on your Title V application. See question # 19 for additional information.

Would Ohio EPA oppose legislative action which would revoke permits for small emissions units now exempt from Ohio

permit rules?

Yes. Ohio EPA sees no advantage in this kind of legislation. Most of these emissions units are on registration status which requires no action by facilities to maintain. For those on permit status (for which a BAT has not been established that limits the emission unit to under the 10 lbs/day cutoff), facilities do not need to renew the permits. Instead, when the permit comes up for renewal, they must notify the Ohio EPA that their emissions unit qualifies for the exemption. At that time, the Ohio EPA will revoke the permit.

Do we need to make a roof drawing of all our vents and stacks?

You are not required to submit a roof drawing with your Title V application. All that will be necessary is for you to provide process flow diagrams for each emissions unit. You will have several different software options to prepare the process flow diagrams.

Do we calculate particulate matter less than 10 microns (PM_{10}) or total particulate matter (PM)?

This depends on the regulations which apply to your emissions unit. In most cases, you will need to do PM. But in some cases you will need to include the fraction which is PM_{10}. See question # 1 for more detail.

If your emissions unit is an new source performance standard (NSPS) type emissions unit, but is not NSPS because of the date it was built or because it is lower than the thresholds listed in the NSPS, do you count fugitive emissions when determining if you are a major source?

Yes. If the emissions unit is a NSPS type emissions unit, then you must count fugitives. See question # 2 for more detail.

19) Do "de minimis" emissions units, as described by OAC 3745-15-04, need to be listed in the Title V permit application under "Insignificant Activities"?

Yes. Ohio law was modified under Substitute House Bill number 715 to make this clear and consistent with Federal law.

20) If an emission is a volatile organic compound, but also a HAP, will enhanced monitoring be established only once the

MACT is established or will it be required for Title V application?

It is USEPA's intention to include monitoring requirements in each MACT that will be sufficient to meet the enhanced monitoring requirements. Once the MACT has been established and is issued, you will need to include the monitoring requirements in your Title V application. If the MACT has not yet been developed, then you don't need to include enhanced monitoring requirements in with your Title V application.

When are the bills going to be sent out for the Fee Emission reports that were filed in June, 1994?

Most of these invoices for those who have filed electronically should be sent out late-December, 1994 through January, 1995. Those facilities that filed a hard copy report should have already received their invoice. For further information you can contact Ron Schultz at (614) 644-3621.

Where can I find examples of operating scenarios?

Ohio EPA has additional guidance on synthetic minors which includes some examples. This can be retrieved from the Ohio EPA BBS. The DEM instruction manual will provide several additional examples. Note, that well written permits should negate the need for detailing operating scenarios in order to allow for reasonable operational flexibility.

If a facility has more than one industrial grouping or standard industrial code (SIC) and only one group has enough emissions to be a major, can the other group be exempt from Title V application?

In most cases, the answer would be no. If the two groups are not completely independent then they would be considered one Title V source. In some cases, if they are completely independent operations (automobile manufacturing and furniture manufacturing, for instance), then they would be considered separate for Title V purposes. These questions should be discussed in detail with your Ohio EPA representative. Further, DAPC is currently working on written guidance that should clarify USEPA's past interpretation of these issues as they relate to federal new source permitting [identical facility (major stationary source) definition provided in the Title V legislation]. This guidance should be available on the DAPC Bulletin Board System by late-January 1995.

24) Why must federal applicable requirements be written exactly as stated in applicable regulations? Why can't we reference by rule number along with the date of rule cited? It appears Ohio EPA Starship will download federal applicable Ohio EPA rules. What about downloading federal regulations such as NSPS or NESHAPS?

Enough detail of the federally applicable requirement is necessary to establish the current SIP requirement. For example the SIP requirement may not relate to the most current OAC requirement. A computer program will be available with the DEM (STARSHIP) that will be very helpful. Also cut and paste will be possible from this product that will allow for a complete description of the applicable requirement with minimal time spent on keying in the answer. The federal requirements are not available for downloading with the initial STARSHIP. Title V facilities will be responsible for understanding which federal requirements are applicable to their facility. Past OEPA permits should provide most of those federal requirements.

Will there be an expanded list of insignificant emissions units and activities? The costs and effort to quantify emissions from all minor activities would be significant.

Yes. Ohio EPA will develop an engineering guide to publish certain activities that are so small (e.g., laser jet printers, aerosol spray paint cans, xerox machines, white out bottles, etc.) that we do not expect them to be quantified and reported as insignificant activities on a Title V application. This guide will be available by May 1995.

How should a facility determine the potential to emit for HAPS?

Generally, this has to be done on a case-by-case basis. In the example of painting operations, HAPs limits would be based on VOC limits assuming all VOC is one or more HAP and assuming the VOC limits are federally enforceable. This would be true unless specific HAPs limits were listed in a permit. USEPA is expected to provide more guidance in this area.. Absent this federal guidance, DAPC will be preparing guidance prior to the implementation of the Title V program.

27) Are Emergency Episode Plans (under OAC rule 3745-25) applicable requirements?

Yes. Emergency Episode Plans are plans which go into effect

in the case of an air pollution episode where it is necessary for facilities to cut back to reduce emissions. Facilities which qualify for these plans must have them in place in order to be in compliance when they file their Title V application. You will need to work with the appropriate DO/LAA representative to either update or establish these plans.

28) How is the Ohio EPA communicating with its districts in regard to facilitating plants which desire to pursue synthetic minor status, and therefore, have several PTI's (or PTO's) to submit. For example, the federally enforceable limits will be based on the maximum emissions stated when there isn't a SIP provision? Can the EPA and the facility discuss monitoring options prior to the permit issuance?

The Ohio EPA has provided training to the District and Local staff concerning synthetic minors and Title V. It is recommended that facilities desiring synthetic minors talk to their field representative about their situation before applying for the permits. Field representatives can give guidance on the best method of restricting potential emissions to avoid Title V. They can also discuss the monitoring or record keeping that will be needed. Further, synthetic minor permitting guidance is available on the DAPC Bulletin Board System.

29) If a facility wants to avoid Title V by restricting their potential emissions, should they use the permit to install process or the permit to operate process?

It is recommended that facilities use the permit to operate process. The only time this is not recommended is if the facility discovers emissions units which should have had a permit to install but didn't or they wish to restrict an emission unit which has not been constructed yet. In this case, a permit to install should be processed.

30) Is there going to be a help line to help Ohio industry with the Title V rules once they are approved?

You will be able to get guidance from the field offices. Also, OEPA central office will have a help line established when you find that sufficient information was not available at the appropriate DO/LAA. We will also continue to prepare hand out material, give presentations, and prepare material for the Ohio EPA bulletin board system. Further, a training video is planned with the distribution of STARSHIP to provide an excellent training tool for operating the electronic application software.

31 Does a facility which becomes a synthetic minor need to do any reporting to demonstrate this status? In other words, how will the Ohio EPA know that a given facility is a synthetic minor facility and, therefore, doesn't need to apply for a Title V permit or pay the Title V fees?

Chapter 3745-78 requires the larger non-Title V facilities to report their potential emissions every two years to establish that they are not Title V. We recommend that your company share its potential to emit analysis with the appropriate DO/LAA. This should minimize the risk of an inadvertent mistake.

32) Is it true that synthetic minors are not required to file the annual Fee Emission Report?

Facilities which are synthetic minors do not need to pay the Title V fees and, therefore, don't need to file the Title V Fee Emission Report. These facilities will need to file every two years a report on the actual emissions for the prior two years in order to pay the non-Title V emission fees established in ORC 3745.11(D). This initial report will not be due until April 15, 1996 for calendar years 1994 and 1995.

MH/TR/
12/28/94
\t5prog\t5brief2

Distribution:

DAPC Section Mgrs
LAA Directors
DO Unit Supervisors
Bob Hodanbosi
Cindy DeWulf
Ron Schultz
Title V Assistance Team
Clara Dailey
DAPC Bulletin Board

Summary of the Final Federal Emissions Trading Policy Statement

Arlene R. Borowsky and Howard M. Ellis
Enviroplan, Inc.
West Orange, New Jersey

EPA's Emissions Trading Policy Statement describes emissions trading and sets out general principles for evaluating emission trades under the Clean Air Act and applicable federal regulations. EPA's concept of emissions trading will allow industry and states more flexibility in meeting National Ambient Air Quality Standards at a lower cost of compliance. This paper is directed to those concerned with using emissions trading to achieve greater flexibility and reduce the costs of complying with air pollution emission standards.

On December 4, 1986, EPA published its Emissions Trading Policy Statement in final form.[1] This policy describes emissions trading and sets out general principles for evaluating emission trades under the Clean Air Act and applicable federal regulations. The final policy replaces the original 1979 Bubble Policy[2] and revises the 1982 Interim Emissions Trading Policy.[3]

EPA's concept of emissions trading will allow industry and states more flexibility in meeting National Ambient Air Quality Standards at a lower cost of compliance. However, to ensure environmental progress, EPA has incorporated in the final Emissions Trading Policy numerous clarifications and more stringent requirements compared to earlier versions of the policy. The following summary of this regulation is intended as a convenient reference. The full text of the Emissions Trading Policy (ETP) should be consulted for specific applications.

The ETP is summarized in eight parts:

1. Air pollutants covered under the ETP.
2. Sources that can use the ETP.
3. Ways in which sources can use the ETP.
4. Definition of emission reduction credits.
5. Definition of baseline emissions.
6. Use of emission reduction credits in bubbles, netting, and offsets.
7. Ambient tests.
8. State generic trading rules.

Definitions of acronyms are as follows:

BACT	Best Available Control Technology
ERCs	Emission Reduction Credits
LAER	Lowest Achievable Emission Rate
NAAQS	National Ambient Air Quality Standards
NESHAP	National Emission Standards for Hazardous Pollutants
NSPS	New Source Performance Standards
NSR	New Source Review
PSD	Prevention of Significant Deterioration
RACT	Reasonably Available Control Technology
SIP	State Implementation Plan
VOC	Volatile Organic Compounds

1. Air Pollutants Covered under the Emissions Trading Policy

- All air pollutants for which there are NAAQS.
- Hazardous air pollutants listed or proposed for listing under Section 112 of the Clean Air Act.

2. Sources that Can Use the Emissions Trading Policy

- All existing sources in attainment and nonattainment areas.
- Major new stationary sources in attainment and nonattainment areas.

3. Ways in which Sources Can Use the Emissions Trading Policy

- *Bubbles* for existing sources seeking less costly emission controls. Emission increases are allowed from one group of sources that are more costly to control in return for emission decreases from another group of sources that are less costly to control.
- *Netting* for modifications at existing plants. A modification at an existing plant is exempt from certain preconstruction permit requirements if there is no net emission increase or any such increase is smaller than specified significance levels. By netting out, the modification is not considered "major" and is not subject to PSD or other preconstruction permit requirements for major modifications.
- *Offsets* for planned new sources or major modifications in attainment and nonattainment areas. In nonattainment areas, a planned new source can obtain adequate emission offsets from existing sources to show progress in attaining the NAAQS. In attainment areas, new sources or modifications can use emission offsets to demonstrate protection of PSD increments, NAAQS, or visibility in a Federal Class I area.
- *Banking* for firms that want to store emission reduction credits for later use in bubble, offset, or netting transactions.

4. Definition of Emission Reduction Credits Eligible for Use in Trading

- An ERC is an emission reduction that is surplus, enforceable, quantifiable, and permanent.
- ERCs are surplus emission reductions not currently required by law. They are emission reductions below the baseline emissions required for attainment and maintenance of the NAAQS, or emission reductions below the applicable emission standards for new sources.
- Emission reductions not generally eligible for use as ERCs are reductions made prior to the application for banking or trading, reductions made before the date of the PSD baseline for attainment areas, and reductions

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meteorological data and a refined dispersion model must be used.

Level III. Full air quality modeling of all surrounding sources is required if there is a net increase above baseline emissions or if the trade will produce a significant air quality impact. Five years of meteorology and a refined dispersion model must be used, but the geographical area to be modeled can be limited.

8. *State Generic Trading Rules*
   - Use of ERCs under state generic rules approved by EPA will not require individual SIP revisions.
   - State generic trading rules will apply only to trades where there is no net increase above baseline emissions.
   - States may adopt alternate generic trading rules that assure attainment and maintenance of the NAAQS.

References

1. U.S. EPA, "Emissions Trading Policy Statement," 51 FR 233, 12/4/86.
2. U.S. EPA, "Bubble Policy," 44 FR 71779, 12/11/79.
3. U.S. EPA, "Emissions Trading Policy Statement," 47 FR 15076, 4/7/82.

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federal register

Thursday
December 4, 1986

Part III

Environmental Protection Agency

Emissions Trading Policy Statement; General Principles for Creation, Banking and Use of Emission Reduction Credits; Final Policy Statement and Accompanying Technical Issues Document

ENVIRONMENTAL PROTECTION AGENCY

[FRL-3085-8]

Emissions Trading Policy Statement; General Principles for Creation, Banking and Use of Emission Reduction Credits

AGENCY: Environmental Protection Agency.

ACTION: Final policy statement and accompanying technical issues document.

SUMMARY: This Policy Statement replaces the original bubble policy (44 FR 71779, December 11, 1979) and makes final revisions in an Interim Emissions Trading Policy which was published April 7, 1982 (47 FR 15076) and on which further comments were requested August 31, 1983 (48 FR 39580).

The policy describes emissions trading and sets out general principles EPA will use to evaluate emissions trades under the Clean Air Act and applicable federal regulations. Emissions trading includes bubbles, netting, and offsets, as well as banking (storage) of emission reduction credits (ERCs) for future use. These alternatives do not alter overall air quality requirements; they give states and industry more flexibility to meet those requirements. EPA endorses emissions trading and encourages its sound use by states and industry to help meet the goals of the Clean Air Act more quickly and inexpensively.

However, EPA also recognizes that without strict accounting practices and other safeguards, emissions trades may cause potential environmental harm. Accordingly, this policy provides more explicit guidance on baselines and related tests for environmental equivalence and environmental progress. It includes numerous tightenings and clarifications meant to assure the future environmental integrity of bubbles and other trading transactions.

Among other general steps, the policy states that the lower of actual or allowable emissions must usually be used as the baseline for emissions trades. Divergences from this baseline will be allowed only where the state or applicant shows that any potential increase in actual emissions will not jeopardize National Ambient Air Quality Standards (NAAQS), PSD increments or visibility protection.

General showings to this effect may be made only by establishing that allowable values were clearly incorporated in or assumed by an approved demonstration of attainment or maintenance. Specific showings to this effect may be made only in narrow circumstances described in the accompanying Technical Issues Document.

Other general matters addressed and significantly clarified by this policy include requirements for air quality modeling and approvable state generic bubble rules, additional enforcement safeguards, and additional safeguards related to bubbles involving pollutants listed, regulated or proposed to be regulated under Section 112 of the Act.

This policy also sets forth new, tighter requirements for bubbles in primary nonattainment areas which require but lack approved demonstrations that national ambient standards for healthy air will be attained. In addition to requiring lowest-of-actual-SIP allowable-or-RACT-allowable emissions baselines in these areas, use of past shutdowns, curtailments or other reductions which occurred before application for credit is essentially eliminated, and a further reduction of at least 20 percent beyond the baseline is required. Broadly speaking, sources may secure bubble credit in these areas only if claimed reductions meet these baseline and further reduction requirements; were reasonably, objectively elicited by the opportunity to trade; and are accompanied by state assurances that the trade is consistent with the state's efforts to attain the ambient air quality standard. EPA will approve bubbles which meet these requirements because they are consistent with the attainment needs of these areas and will yield a net air quality benefit. Such bubbles can produce economic savings and environmental improvement at the same time.

The policy announced today does not constitute final action of the Agency within the meaning of section 307(b) of the Clean Air Act, and therefore is not judicially reviewable. Rather, it establishes general guidance on approvable voluntary trades. EPA will implement this guidance in later rulemaking actions that will be judically reviewable. Applicants for emissions trades remain free, following publication of today's notice, to advance the appropriateness of different trading requirements in the context of rulemaking actions on their individual trades.

EFFECTIVE DATE: This Policy Statement is effective December 4, 1986.

FOR FURTHER INFORMATION CONTACT: Inquiries regarding the general implementation of this policy may be directed to: Barry Gilbert, Office of Air Quality Planning and Standards (MD-15), Research Triangle Park, NC 27711, (919) 541-5516.

Inquiries regarding specific applications to use this policy may be directed to the appropriate EPA Regional Office (see Appendix A of the Technical Issues Document)

Inquiries regarding the development and basis of this policy may be directed to: Barry Elman, Regulatory Reform Staff (PM-223), U.S. Environmental Protection Agency, 401 M Street SW., Washington, DC 20460, (202) 382-2727

SUPPLEMENTARY INFORMATION: Under Executive Order 12291, EPA must judge whether this action is "major" and therefore subject to the requirement of a Regulatory Impact Analysis. This action is not major because it establishes policies, as opposed to regulations, and can substantially reduce the costs of applying with the Clean Air Act

This Policy Statement was submitted to the Office of Management and Budget for review. Any comments from OMB to EPA are available for public inspection in Docket G-81-2. Pursuant to U.S.C. 605(b), I hereby certify that this action will not have a significant economic impact on a substantial number of small entities. As a policy designed to allow firms flexibility to meet previously established regulatory requirements, it will impose no burdens on either small or large entities.

The contents of today's preamble are indicated in the following outline. The outline is followed by the preamble itself, and then by the Policy Statement and accompanying Technical Issues Document.

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PREAMBLE—EMISSIONS TRADING POLICY STATEMENT

I. Introduction

Today's policy makes final the Agency's prior guidance on general principles for creating, storing (banking) and using emission reduction credits in trading actions under the Clean Air Act. This preamble responds to written comments EPA received on major issues raised by its proposed emissions trading policy statement (47 FR 15076, April 7, 1982) and subsequent request for further comment (48 FY 39580, August 31, 1983). It also explains the Agency's principal decisions on these issues.

Today's notice is the primary source of EPA guidance on existing-source bubbles, state generic bubble rules, and emission reduction banking. It replaces the original bubble policy (44 FR 71779, December 11, 1979) as well as the proposed emissions trading policy statement, which was effective April 7, 1982 as interim guidance. The notice addresses how emission reduction credits (ERCs)—the currency of trading—may be used for bubbles, as well as for netting or offsets. Netting and offsets are part of emissions trading, but are governed by EPA and state regulations for new source review.[1]

Nothing in today's notice alters EPA new source review requirements or exempts owners or operators of stationary sources from compliance with applicable preconstruction permit regulations in accord with 40 CFR 51.18, 51.24, 51.307, 52.21, 52.24, 52.27 and 52.28. Interested parties should, however, be aware that bubble trades are not subject to preconstruction review or regulations where these trades do not involve construction, reconstruction, or modification or a source within the meaning of those terms in the regulations listed above.

The policy announced today does not constitute final action of the Agency within the meaning of section 307(b) of the Clean Air Act, and therefore is not judicially reviewable. Rather, it establishes general guidance for reviewing and approving voluntarily submitted trades. EPA will implement this guidance in later rulemaking actions that will be judicially reviewable. Applicants for emissions trades remain free, following publication of today's notice, to advance the appropriateness of different trading requirements in the context of rulemaking actions on their individual trades.

Under today's notice, EPA continues to authorize use of bubbles, banks, and generic bubble rules in all areas of the country, and provides for the fair and prompt processing of bubble applications which have been pending before EPA under the 1982 policy. However, based on experience under the 1982 policy, and in order to ensure the environmental integrity of future emissions trades, today's notice significantly tightens requirements applicable to certain trading actions, particularly existing-source bubbles in primary nonattainment areas which require but lack demonstrations of attainment. It also clarifies approval criteria in ways which should make review and approval of environmentally-sound trades more rapid and predictable. Among other safeguards or safeguarding clarifications, it requires that:

- Bubbles may no longer result in any increase in applicable net baseline emissions in any area, whether attainment or nonattainment, except under stringent conditions which assure that ambient equivalence will nevertheless be achieved;[2]
- Baselines for sources participating in a bubble in any area must take into account all three factors relevant to total emissions (i.e., emission rate, capacity utilization, and hours of operation) in order to provide an accurate accounting of emissions before and after the trade;

[1] See, e.g., 40 CFR 51.18, 51.24, 51.307, 52.21, 52.24, 52.27 and 52.28.

On November 7, 1986, EPA restructured CFR Part 51 and renumbered many of that Part's sections (51 FR 40656). Because most readers will be more familiar with prior designations, today's notice contains citations based on the organization of Part 51 as it existed before this restructuring. Interested parties may use Appendix F of today's Technical Issues Document to convert today's Part 51 citations to the corresponding new ones.

[2] This change constitutes a significantly more stringent definition of what may be considered a bubble under the Emissions Trading Policy. Specific ambient tests which must be met to qualify for an exception from this restriction can be found in the Technical Issues Document, Section [illegible]. Actions which may no longer be treated as bubbles under today's notice must be processed under general EPA criteria applicable to SIP revisions.

• Bubbles in primary nonattainment areas needing but lacking approved demonstrations of attainment must use the lowest-of-actual-SIP-allowable-or-RACT-allowable emissions baseline, as described below, for each source involved in the trade;

• Bubbles in primary nonattainment areas needing but lacking approved demonstrations must contribute to progress toward attainment by providing a 20% net reduction in emissions remaining after application of the baseline above to all sources involved in the trade or, if the bubble is being processed under a state generic rule, the greater of a 20% net reduction or the percent reduction which would be required from all controllable stationary sources in that area (e.g., taking into account expected mobile source reductions and disregarding area-source contributions) in order to achieve attainment;

• Bubbles in attainment areas and nonattainment areas with approved demonstrations must use the lower of actual or allowable values for each of the three baseline components, unless allowable values higher than corresponding actual values are clearly used or reflected in the demonstration or otherwise shown not to jeopardize ambient standards, PSD increments or visibility;

• In all areas, emission reductions must be made state-enforceable in order to qualify as ERCs and be deposited in an EPA-approvable bank;

• In all areas, bubbles must meet more stringent tests for ambient equivalence, including additional ambient significance levels, more protective air quality modeling requirements, and more conservative definitions of *de minimis* trades;

• In all areas, the total of any incidental emissions of hazardous or potentially hazardous air pollutants associated with a criteria pollutant in a bubble trade must remain equal or be decreased, whether such hazardous pollutants have been regulated, proposed for regulation, listed, or the subject of a notice-of-intent-to-list under Clean Air Act 112;

• States must provide assurances to EPA that bubbles submitted for EPA approval in primary nonattainment areas needing but lacking approved demonstrations are consistent with the state's SIP-planning and attainment objectives. For generic rules, the state must make certain assurances in conjunction with its submittal of the generic rule to EPA, and certain additional assurances with the state's proposed and final approval of each individual bubble under that rule;

• Bubbles in such primary nonattainment areas may not use credit from reductions made before application to bank or trade such credit;

• Where sources in such areas seek to bank credits in the future, "application to bank," for purposes of evaluating credits for use in bubbles, means the time of filing an application to make the proposed credits state-enforceable through or concurrent with use of a formal or informal banking mechanism;

• Bubbles must not impede compliance or enforcement (e.g., the policy states that compliance extensions may no longer be granted under generic rules in any nonattainment area, and that bubble applications do not *per se* suspend underlying SIP limits or defer source obligations to achieve those limits);

• Generic rules in all areas will be subject to increased EPA oversight, including EPA participation in the state's public notice and comment process prior to state approval of individual bubbles, subsequent reviews of individual generic approvals, and reviews of the general implementation of the rules themselves, in order to assure that approved rules are being properly implemented; and

• EPA or state notices of proposed and final bubble approvals, in all areas, must clearly indicate any changes in actual as well as allowable emissions at all sources involved in the bubble, so the ambient effects of these trades may be known.

These and other changes announced today will generally be applied to all SIP revision bubbles and state generic bubble rules that have not been approved by EPA as of this date.[3]

On June 25, 1984 the Supreme Court unanimously ruled that EPA may allow states to use a single, plantwide definition of "stationary source" for new source review (NSR) purposes in nonattainment areas as well as attainment areas, provided use of that definition would not interfere with attainment and maintenance of national ambient air quality standards (NAAQS).[4] Under the "plantwide" definition, increases and decreases occurring anywhere on plant property from emission units within the same two-digit SIC code are generally eligible for netting,[5] and may be used to balance each other without triggering preconstruction permit requirements for major new sources or modifications, so long as actual plantwide emissions would not significantly increase.

States and sources considering the use of netting should, however, be aware that applicable New Source Performance Standards (NSPS), preconstruction review requirements under 40 CFR 51.18 (a)–(h) and (1), NESHAPS, and SIP limits continue to apply to such modifications. EPA is currently developing guidance for states that wish to adopt a plant-wide definition of "source" for nonattainment areas into their new source review regulations.[6]

Pending or future litigation or rulemaking, particularly final resolution of the settlement agreement arising from the industry challenge to ERA's 1980 promulgation of revised NSR rules (*Chemical Manufacturers Association v. EPA*, No. 79–1112, D.C. Cir., February, 1982), may alter aspects of this policy, especially regarding certain transactions under EPA new source review regulations. See 48 FR 28742 (August 25, 1983) (proposed revisions). However, unless and until EPA finally revises the relevant regulations, the current requirements remain in effect.

II. Major Issues

A. Baselines

The baseline for a given source is that level of emissions below which any additional reductions may be counted (credited) for use in trades. Questions relating to appropriate bubble baselines for particular emitting sources or types of sources in nonattainment areas generated the principal issues resolved by today's notice. EPA's resolutions strengthen SIP integrity and states' ability to make progress toward attainment by (a) identifying more

[3] See, however, discussion of "pending bubbles" in Section I.G. of today's Policy Statement and Section I.A.1.b.(4) of today's Technical Issues Document.

[4] *Chevron U.S.A., Inc. v. Natural Resources Defense Council*, 104 S. Ct. 2778, 14 ELR 20507, overruling *Natural Resources Defense Council, Inc. v. Gorsuch*, 685 F.2d 718, 12 ELR 20942 (D.C. Cir. 1982).

[5] SIC Code means codes described in the Standard Industrial Classification Manual, 1972, amended 1977 (U.S. Government Printing Office, stock numbers 4101–0066 and 003–005–00176–0, respectively).

[6] Many states currently employ the so-called "dual definition" of "statutory source," under which both the plant and each emitting piece of equipment within it are "stationary sources." Under this definition, when any individual piece of equipment is large enough in terms of potential emissions to be defined as a "major stationary source," only increases and decreases in actual emissions from that individual unit are eligible to "net."

While the plantwide definition provides greater opportunity for netting in general, netting is also allowed under the dual definition. Indeed, where no individual piece of emitting equipment is a "major stationary source," the "dual definition" allows the same opportunity to "net" as the "plantwide" definition.

precisely the three factors which must be addressed in calculating baseline emissions; (b) reaffirming that for bubbles in nonattainment areas with demonstrations of attainment that have been approved and not subsequently found by EPA to be substantially inadequate to attain ambient standards, the baseline must be consistent with assumptions used to develop the area's demonstration or must otherwise be shown by appropriate ambient dispersion modeling to protect air quality standards; and (c) specifying a number of special "progress" requirements for bubbles in primary nonattainment areas needing but lacking approved demonstrations of attainment, including stringent new baseline requirements, a ban on the use of reductions produced before application to bank or trade, and a mandatory extra reduction of at least 20% beyond applicable baseline emissions. Together with tightened criteria for modeled demonstrations of ambient equivalence, a well as other new requirements for bubbles, banks, and generic rules, these resolutions will ass ire continued e nmental progress through trades.

1. nining Baselines—General Gui ce

A source's baseline emissions are calculated by multiplying three factors: the source's *emission rate* (usually expressed as emissions per quantity of production or throughput); its *hours of operations* or hourly usage over some representative time period; and its *capacity utilization* (e.g., the units of production per hour of use).[7] All three factors must be addressed, since a source's emissions for a given period may vary widely despite a constant emission rate, depending, for example, on whether it is operated at low capacity for a small number of hours or utilized near full capacity for a large number of hours. The product of this baseline calculation is generally expressed in pounds of emissions per day or tons of emissions per year (TPY), or both.

Today's policy clarifies EPA's original intent regarding appropriate methods for determining these three baseline factors. In general, in nonattainment areas with approved demonstrations, a source's baseline emissions for bubble purposes must be calculated using the lower of it sc emission rate or allowable ea n limit, plus the lower of its ac allowable capacity utilization and hours of operation. That is, baseline emissions in these areas must generally be calculated using lower of actual or allowable values for all three baseline factors.[8]

Actual values for these factors are based on some representative historical time period (generally the average of the two years preceding the source's application to bank or trade).

However, where the state or applicant shows that the SIP, a source-specific preconstruction permit, or an equivalent document clearly assumes or specifies allowable values which are higher than corresponding actual values for one or more baseline factors, and that document post-dates the baseline inventory year for a SIP's attainment demonstration, these values may replace actual values for calculating the bubble baseline. Where only one value (typically the emission rate) is specified, the other two baseline factors must generally be based on actual levels.[9]

Such showings must be based on either data from the SIP or data used in SIP preparation.[10] Applicants may alternatively perform appropriate modeling to demonstrate that use of allowable values which are higher than actual values will not delay or jeopardize attainment and maintenance of ambient standards, protection of PSD increments, or visibility. Upon either type of showing, these allowable values may be used.[11]

This approach is required because control of existing sources through approved SIP measures is the Clean Air Act's principal mechanism for timely attainment, and because many approved demonstrations either do not contain stated assumptions regarding all three baseline factors, or were based on combinations of actual and allowable values for these factors. It recognizes that bubble baselines must accurately reflect the SIP assumptions for all three baseline factors in order to maintain SIP integrity.

Under this approach, determination of bubble baselines consistent with approved demonstrations is a sequential, tiered process. That process was implicit in both EPA's 1982 policy and its 1983 request for further comment, as well as actual practice in bubble actions under those notices. EPA is making it explicit in response to concerns that "paper trades" might undermine attainment demonstrations because approved SIPs do not always state all assumptions on which their demonstrations rely. By requiring that unstated or ambiguous values for all baseline factors *be resolved in favor of lower actual values*, today's notice provides additional assurance that bubbles in nonattainment areas with approved demonstrations will not threaten ambient standards, PSD increments, or visability protection.

2. Comments on Baselines in Nonattainment Areas With Approved Demonstrations of Attainment

Comments on baselines in these areas indicated wide disagreement over where EPA require states to set this baseline level. The 1982 policy noted that "In nonattainment areas with approved demonstrations of attainment, the baseline must be consistent with assumptions used to develop the area's SIP." That policy generally required that where approved SIP demonstrations relied on *actual* emission levels at particular sources, those actual levels would have to be reflected in bubble baselines. Where SIP demonstrations were based on *allowable* emissions, the 1982 policy authorized baselines reflecting such allowable levels, despite the fact that some sources' actual emissions are currently or historically lower than their "allowables."[12]

[7] For detailed discussion of baseline emissions and baseline factors, see Technical Issues Document, Appendix B.

[8] Netting and offset transactions are governed by EPA's regulations at 40 CFR 51.18, 51.24, 51.307, 52.21, 52.24, 52.27 and 52.28. Accordingly, this discussion of baseline applies only to bubbles.

[9] See Section I.A.1 and Appendix B of today's Technical Issues Document for further details on baseline calculation.

[10] This could include documentation such as the demonstration calculations themselves, accompanying materials, or affidavits from those who constructed the demonstration.

[11] Use of such higher allowable values which must be justified by modeling because they are not shown to be clearly reflected in or assumed by the demonstration or an equivalent document, would require such bubbles in nonattainment areas with approved demonstrations to be processed as SIP revisions, since Level III modeling would be required for their justification under today's modeling screen. In addition, the SIP's reasonable further progress (RFP) calculations would generally have to be revised.

The principal difference between use of such higher allowable values in these nonattainment areas and in attainment areas is that in attainment areas, ambient evaluations more limited than Level III modeling may justify use of such allowable values. However, for bubbles processed as case-by-case SIP revisions in attainment areas, the Region retains discretion to require additional technical support, where limited air quality dispersion modeling is proposed to justify use of such allowable baseline values. See Section I.A.1.a. of today's Technical Issues Document.

All bubbles in attainment areas relying on allowable values not used or reflected in an approved demonstration must be evaluated for ambient impact based on a comparison of before-trade actual emissions and post-trade allowable emissions (i.e., the "worst case"), in order to assure that any potential increase in actual emissions are identified and that their effects are consistent with applicable Clean Air Act requirements. See today's Technical Issues Document, Section I.A.1.a.

[12] See n. 13 below.

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The great majority of commenters supported this SIP foundation for trading baselines, noting that SIPs are the cornerstone of the Act's approach to air quality management. These commenters also asserted that regardless of sources' actual emissions, measuring reductions from allowable levels assumed in a valid SIP demonstration was entirely appropriate for use in trading, since the area would still attain ambient standards in a timely manner. See, e.g., 48 FR 39582 (August 31, 1983).

However, other commenters asserted this approach was either "too loose" or "too tight." The first group stated that credit should only be granted for reductions below current actual emissions, provided actual emissions met applicable SIP limits.[13] They advanced various reasons for this position, including assertions that reliance on past reductions, while consistent with approved plans for attainment, might not comport with "broader" clean air goals. Some felt that SIPs were insufficently precise to serve as a basis for trading.

A second group of comments went in the opposite direction, asserting that baselines should always be maximum allowable source emissions, regardless of assumptions used in SIP development. These commenters noted that emission *rates* (e.g., emissions per volume of throughput or unit of production) specified in SIP emission limits are generally the only enforceable limits applicable to existing sources. Since existing sources can legally emit up to annual levels equivalent to maximum output and round-the-clock operations so long as they meet these SIP emission-rate limitations, these commenters reasoned, companies should receive credit for agreeing to binding limits on output or hours of operations which forgo such production flexibility.

Today's notice responds in two principal ways to these concerns. First, it clarifies the components of baselines, how these are to be determined, and who bears the burden of demonstrating that a proposed baseline is consistent with a particular SIP. Several comments indicated that confusion related to the determination of baselines may have generated unnecessary concern over use of allowables baselines under approved SIPs. Second, it reiterates and further supports EPA's position that *where SIP demonstrations are approved as adequate*, the Clean Air Act simply requires trading to be consistent with assumptions used to develop the area's SIP.

3. EPA's Resolutions on Baselines in Nonattainment Areas With Approved Demonstrations of Attainment

Where a state has demonstrated it will attain an ambient standard, and EPA has approved the demonstration and not subsequently found it substantially inadequate to assure attainment, bubbles relying on baseline levels used or reflected in that demonstration amount to routine SIP revisions. The state then has discretion to maintain its demonstration through any alternative combination of emission reductions, so long as these are adequate for attainment and maintenance of the ambient standards. Since EPA cannot require states to do more than demonstrate timely attainment and maintain ambient standards, EPA will approve such trades as long as they are enforceable and do not undermine the demonstration. See, e.g., *Train* v. *NRDC*, 421 U.S. 60, 79–80 (1975); *Union Electric Co.* v. *EPA*, 427 U.S. 246 (1976). This means that credits must not be doubled-counted, that they must be calculated from a baseline consistent with the approved demonstration, and that tests of air quality equivalence to the original SIP emission limits must be met.

In short, under the Clean Air Act an approved attainment demonstration creates a legal and logical boundary. The state has met its statutory responsibility and can substitute reductions not relied on in the SIP for those assumed by the SIP, so long as air quality impacts are equivalent. This holds true for all types of emission reductions—whether derived from process changes, extra pollution control equipment, improved operating or maintenance procedures, or other actions—as long as the substitute reductions have not been relied on in the approved SIP.[14]

EPA accordingly reaffirms the general principle that states may grant sources credit for reductions below levels assumed by approved demonstrations. This generally means that where actual values for emission rate, capacity utilization and hours of operation form the basis for an approved demonstration, sources proposing a bubble must use the lower of actual or allowable values for those factors in calculating baseline emissions, and that where an approved demonstration was based on allowable values which are higher than corresponding actual values for any of these baseline factors, those allowable values may be used for such factors in calculating the baseline.

B. Baseline and Other Requirements for Bubbles in Primary Nonattainment Areas Which Require But Lack Approved Demonstrations of Attainment

EPA's 1982 policy proposed two baseline mechanisms for bubbles in primary nonattainment areas needing but lacking approved demonstrations of attainment. These areas needed additional emission reductions to attain national ambient health standards, but had not yet fully determined what amount of reductions would be necessary for attainment or which sources would be required to produce them. Nevertheless, that policy said, states could allow existing sources in these areas to trade on an interim basis, either (1) by using baselines reflecting Reasonably Available Control Technology (RACT) provisions which EPA had already approved, or (2) where EPA had not yet approved general state RACT provisions, by using "negotiated RACT" baselines agreed to between the source, the state and EPA.[15] Both the 1982 policy and subsequent notices advanced detailed programmatic and environmental rationales for this approach, including the fact that RACT was the Act's most stringent general requirement for existing sources in nonattainment areas; that appropriately determined RACT baselines were consistent with current attainment needs; and that trades using such baselines could produce faster interim progress by providing incentives for sources voluntarily to define RACT, disclose better emissions or ambient data, or take other steps to do more than the minimum required. See, e.g., 47 FR 15076, 15080–81; 48 FR 39582–83, 39585.

Many commenters on the 1982 policy approved this "negotiated RACT"

[13] The 1982 policy assumed, but did not specify, the components of "actual" emissions, such as capacity usage or number of hours of operation of a particular source. It also assumed, but did not expressly require, that actual emission levels must be reduced to compliance levels before further reductions were eligible for credit.

[14] It also holds true where the Agency may suspect, but has not formally indicated, that a previously approved SIP demonstration is no longer adequate to assure timely attainment. For reasons of policy continuity, regulatory predictability and fair notice, until EPA makes a formal finding of SIP inadequacy, the approved demonstration controls. See Clean Air Act section 110(a)(2)(H), 110(c)(1); 48 FR 39582 (August 31, 1983).

[15] The 1982 policy also authorized limited use of higher actual (rather than RACT-allowable) baselines in certain nonattainment "extension" areas which did not then have complete approved SIPs. See 47 FR 15077, 15080 (April 7, 1982). Expiration of the July 1982 statutory deadline for submitting such SIPs vitiated this third baseline option. See, e.g., 48 FR at 39580 and n.2, 39582 and n.7, 39584–85 (August 31, 1983).

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approach, finding it innovative and acceptable. However, two groups of commenters again asserted that it was either "too restrictive" or "insufficiently constrained." The first group maintained that for reasons of administrative efficiency, bubbles should be based either on existing SIP reduction requirements or on actual emissions, without the need to negotiate new source-specific RACT baselines. Since trading sources in these areas would eventually be subject to RACT requirements in any case, they reasoned, no new interim baseline should be required. In partial support of this position some alluded to the one instance in which Congress has explicitly addressed such baseline issues—its 1977 declaration that in nonattainment areas without adequate demonstrations, existing SIP limits would for the next several years be the baseline for offset transactions, which were then the only types of emissions trades.[16]

The second group asserted that no [illegible]les should be allowed in such [illegible] since regulators could not know [illegible] reductions were surplus until den[illegible]strations were completed and approved.

In August 1983, "in light of formal comments on the [1982] Policy, the *NRDC* v. *Gorsuch* decision [since reversed] . . . and the need to further articulate the Policy's approach in this area," EPA requested further comment on certain issues relating to credit from plant shutdowns or production curtailments for use in existing-source bubbles, particularly bubbles in primary nonattainment areas requiring but lacking demonstrations. 48 FR 39580. While most comments on the 1982 policy supported continued use of such credits without further restrictions, some commenters had special concerns about shutdowns in these areas. These commenters stated that shutdowns can hasten attainment, and suggested that granting credit for shutdowns that 'might have happened anyway' might not be consistent with the Act's requirement for attainment "as expeditiously as practicable."

[16] See, e.g., Clean Air Act Amendments of 1977, section 129, codified at 42 U.S.C. 7502 note; 3 [illegible]*tive History of the Clean Air Act* [illegible]*ents of 1977*, pp. 537, 713; 44 FR 2174–75 [illegible] 9, 1979). This Congressional mandate was [illegible] erseded by eventual state adoption of super[illegible]ing SIP limits. Under current EPA regulations such SIP allowable emission rates may ordinarily be used to compute the baseline for offsets only where an approved SIP demonstration used inventoried allowable emissions in its demonstration of reasonable further progress. See Clean Air Act 173(1)(A), 42 U.S.C. 7503(1)(A).

In the August 1983 notice EPA addressed these concerns in detail, noting that:

> . . . Unlike surplus reductions from additional pollution control or less-polluting process changes, shutdowns produce a total reduction of emissions, 100% of which might benefit air quality if credit were not allowed. Granting full or partial credit for their use in existing-source bubbles might reduce that benefit . . . at least where the source would have shut down anyway. This reasoning [reflecting a desire to avoid granting credit for reductions that may not be "surplus" because they would have occurred in any event] underlies some commenters' suggestions that credit be allowed only if credit were a sole or principal reason for the shutdown . . .
>
> Unfortunately the issue is not this simple. So long as it has not been double-counted and a proper RACT baseline is applied, the shutdown does contribute to air quality progress, since much less than 100% credit will be granted. Moreover, the opportunity for credit may improve air quality by encouraging early shutdown of high-polluting facilities that might otherwise be kept running, either because replacement is too expensive or to preserve credit for further plant expansion.
>
> In addition, these commenters' suggestion of a test based on subjective motive appears administratively unworkable. EPA and states would find it exceedingly difficult to evaluate or rebut source evidence that a shutdown was motivated by credit and that the shutdown facility would otherwise have operated [, e.g.,] for twenty or forty years. Thus this approach would likely result in either *de facto* approval of all such credits (undermining the reason for the test), or a burden of proof so stringent that none would be approved (penalizing sources whose shutdowns were elicited by trading). More straightforward approaches might either ban shutdown bubbles until a demonstration of attainment, or acknowledge their uncertain nature by applying a margin of safety—e.g., a requirement that such bubbles produce substantial air quality improvement—sufficient to compensate for any uncertainties and protect the integrity of current or future SIPs. 48 FR at 39583–84 (footnotes omitted.)

EPA then suggested seven specific alternatives to the 1982 policy for bubbles in these areas, including: a prohibition on bubble credit from shutdowns; a requirement of substantial air quality benefit from bubbles proposing to use shutdown credit; or a requirement of substantial air quality benefit from all bubbles, with no special restrictions on shutdown credit. In partial support of this last proposed alternative, EPA indicated the administrative benefits of avoiding special definition or treatment of "shutdowns" and "curtailments," and stated that:

> . . . Requiring substantial progress from each bubble . . . could accelerate momentum toward attainment, directly improve air quality through each trade, and provide an objective margin of safety against uncertainties associated with some individual shutdowns, while leaving to the state the task of final SIP development. It would also maintain the incentive within the [1982] Policy for industry to shut down high-polluting, economically-marginal sources . . . . The more each existing-source bubble contributes directly to accelerated air quality progress, the stronger the justification for use of surplus reductions for such bubbles in the absence of a demonstration. Moreover, requiring all bubbles to produce a substantial air quality improvement, beyond RACT baselines and RACT equivalence, could provide a margin of safety sufficient to make special treatment of shutdowns unnecessary . . . 48 FR at 39585–86 (footnotes omitted).

Thus, while the issue explicitly raised by the August 1983 notice was use of bubble credit from shutdowns in primary nonattainment areas which lack approved demonstrations, the underlying issue was use of *any* type of bubble credit in these areas. Since emission reductions have the same effect on air quality whether produced by less-polluting process changes, more efficient operation of installed control equipment, additional pollution controls, or shutdowns or production curtailments, the fundamental question was whether *all* such reductions or none of them should be prohibited or subject to special requirements when used for bubbles in these areas. That question reflected a further choice. Should EPA defer bubbles in these areas until a compete demonstration was finally approved? Or should EPA authorize continued use of bubbles, in order to secure interim emission reductions?

Comments responding to the August 1983 notice were essentially the same as earlier ones. A large majority of industries and state pollution control agencies commenting at that time supported continued opportunity for bubbles (including those using credit from shutdowns) in nonattainment areas with or without approved demonstrations. Virtually all industries and states commenting with respect to areas that *have* approved demonstrations supported continued use of the 1982 policy, without change.[17] Of 13 state agencies commenting with respect to areas that *do not have* approved demonstrations, ten urged that shutdown credits be retained for these

[17] E.g., Allegheny County (PA) Health Department, Bureau of Air Pollution Control; Air Pollution Control District of Jefferson County (Louisville); Cf. Dayton (OH) Regional Air Pollution Control Agency. See also, e.g., comments of Chevron USA

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areas as well.[18] However, many comments also supported or acknowledged the appropriateness of a requirement for a net air quality benefit—in the range of 20% extra reductions in emissions remaining beyond a baseline reflecting RACT emission limits—from each bubble, so long as that requirement was objective and easily administered.[19] To the extent they addressed this issue, these comments generally opposed efforts to test bubbles by examining the subjective motives underlying reductions.[20] Two state of local agencies asked that bubbles be prohibited in these areas until complete demonstrations were approved by EPA.

Several commenting environmental groups asserted that EPA should not permit any bubbles in nonattainment areas lacking adequate demonstrations. One argued that EPA cannot determine that emission reductions are "surplus," and therefore creditable, in these areas because to do so would violate the statutory requirement to attain standards "as expeditiously as practicable." Moreover, this group claimed, using RACT as a baseline would not solve this problem because RACT limits are minimum measures, not a substitute for a SIP providing timely attainment. This group also asserted that crediting shutdowns would conflict with states' duty to meet air quality standards "as expeditiously as practicable" because, by "resurrecting" emissions that have already ceased, it would accomplish less emission reduction than is practicable within a given period of time. Another group asserted that allowing shutdown credits in these areas would strain efforts to progress toward attainment. One environmental group went a step further and urged that opportunity for bubbles be restricted solely to attainment areas which have already met national air quality standards.[21]

At the same time, comments filed on Federal Register proposals to approve individual bubbles as SIP revisions under the 1982 policy[22] raised related issues. Several of these proposed bubbles were also located in primary nonattainment areas which required but lacked approved demonstrations. The issue raised related to bubbles of two types: (1) Those which relied on reductions from shutdowns that occurred long before any application to bank or trade; and (2) those which relied on extra reductions produced by routine installation of required control equipment, long before application to bank or trade. Both types of bubbles raised the larger question of whether SIP integrity and environmental progress might better be assured in primary nonattainment areas which require but lack approved demonstrations of attainment by allowing no bubble credit, or allowing bubble credit only for reductions beyond actual emission levels already achieved *as of the time sources applied to bank or trade.*

The final policy strikes what EPA believes to be a reasonable, environmentally-sound balance between all these views, and establishes numerous tightening clarifications and new requirements to implement that balance. These changes and the rationales supporting them are set forth below.

1. EPA's Resolutions Regarding Baseline and Other Requirements

In primary nonattainment areas which require but do not, at the time of a bubble application, have EPA-approved demonstrations that ambient health standards will be attained, bubbles will generally be approved if they do not rely on reductions which occurred before application for credit; if they meet other criteria for baselines, ambient equivalence, and consistency with future planning efforts; and if they produce at least a 20% net reduction in emissions remaining after appropriate baselines have been applied. These objective tests both respond to previous comments on certain individual bubble applications, and go substantially beyond alternatives discussed in EPA's August 1983 notice. At the same time they assure greater predictability and ambient progress, without imposing so heavy a burden on voluntary bubble transactions that the environmental benefits of such trades are forgone. The reflect the general principle that because such properly-structured bubbles provide continuing incentives for sources to deliberately overshoot regulatory marks (rather than plan merely to meet them), bubble trades in these areas can produce interim progress beyond current SIP requirements, and should be approved.

a. Specific "Progress" Requirements. Applications for existing-source bubbles in primary nonattainment areas which require but lack approved demonstrations of attainment will be deemed to produce a net air quality benefit and will be processed for approval if they:

(i) Use "lowest-of-actual-SIP-allowable-or-RACT-allowable" emissions baselines. Such baselines must be calculated using

- Either the actual emission rate, the SIP or other federally enforceable emission limit, or a RACT emission limit, whichever is lowest, for each source involved in the trade. This baseline factor shall be determined as the time of the source's application to bank or trade, whichever is earlier.
- The lower of actual or allowable capacity utilization and hours of operation for each source involved in the trade. These baseline factors shall generally be based on the two years of operation preceding the application to bank or trade, unless another two year period is shown to be more representative of normal source operations;

(ii) Meet the general *ambient* equivalence tests outlined in today's policy (see Section I.B.1.b of the Technical Issues Document) using the baselines described above and, for the post-bubble case, emission levels that reflect overall *emissions* equivalence; and

(iii) Produce a substantial net reduction in actual emissions—i.e., a reduction of at least 20% in the emissions remaining after application of the stringent new baselines described above. (A reduction of greater than 20% may be required for bubbles approved under generic rules in some of these nonattainment areas. See discussion in Section III.A.1.(d) of this Preamble, below.)

With respect to sources which seek to bank emission reductions after publication of today's notice, "application to bank." For purpose of evaluating credit for use in bubbles, means the time of filing of an

[18] E.g., Memphis Health Department; Colorado Dept. of Health, Air Pollution Control Division. Cf. comments of Illinois EPA.

Many industrial commenters also asserted the importance of continuing to allow shutdown credits in these nonattainment areas. See, e.g., Chevron USA; Champlin Petroleum.

[19] E.g., Bay Area (CA) Air Quality Management District. See also Southern California Gas Co.

[20] E.g., Massachusetts Department of Environmental Quality Engineering; South Coast (CA) Air Quality Management District.

[21] In oral or written submissions to the Administrator made in early 1986 while final decisions on today's policy were still pending, representatives of seven states and the State and Territorial Air Pollution Program Administrators and the Association of Local Air Pollution Control Officers (STAPPA/ALAPCO) similarly urged that bubbles no longer be authorized in primary nonattainment areas until a complete attainment demonstration was submitted or approved. This position was generally echoed by a coalition of environmental groups. Since this position and related underlying issues had been raised and articulated at length by earlier comments, it is addressed as part of the Agency's final response below.

[22] Cf., e.g., Union Carbide Corp. (Texas City), 47 FR 21533 (May 19, 1982); B.F. Goodrich (Avon Lake), 49 FR 4796 (February 8, 1984).

application to make such reductions state-enforceable through or concurrent with use of a formal or informal banking mechanism. However, in order to avoid needless disruption and inequitable retroactivity, this definition does not apply to reductions which sources have previously applied to bank. See Section I.A.1.b.(1) of the Technical Issues Document.

b. Additional "Progress" Requirement: State Assurances. In concluding that properly-structured bubbles as defined above can produce valuable interim progress in primary nonattainment areas which require but lack approved demonstrations, EPA also considered whether other showings might be necessary to assure that individual bubbles do produce such progress. The Agency has concluded that few such showings, whether bubble-related or otherwise, are practicable or workable. It did, however, conclude that certain representations meant to assure each bubble's consistency with SIP planning goals, by requiring states to take a meaningful look at such consistency in each bubble approval, would help assure that progress is achieved.

Under circumstances detailed in the final Policy and Technical Issues Document, today's notice therefore requires the appropriate state authority to provide the following written assurances to accompany each bubble which is approved (either directly by EPA as a case-by-case SIP revision, or by states under an EPA-approved generic rule) in these areas:

1. The resulting emission limits are consistent with EPA requirements for ambient air quality progress, as specified in today's notice.

2. The bubble emission limits will be included in any new SIP and associated control strategy demonstration.

3. The bubble will not constrain the state or local agency's ability to obtain any traditional emission reductions needed to expeditiously attain and maintain ambient air quality standards.

4. The state or local agency is making reasonable efforts to develop a complete approval SIP and intends to adhere to the schedule for such development (including dates for completion of emissions inventory and subsequent increments of progress) stated in the letter accompanying the bubble approval or in previous such letters.

5. The baseline used to calculate the bubble emission limits is consistent with baseline requirements in the Emissions Trading Policy Statement and Technical Issues Document.

Such assurances need not be verified by, e.g., detailed quantifications, comparison with year-by-year progress projections, or showings that all reductions needed for area-wide progress or attainment have been identified and targeted for regulation. They are, however, expected to be based upon meaningful review by the state and to be consistent with the documentation supporting the bubble. EPA will not second-guess such state representations, provided they are a substantial test applied by the state to each bubble and the state has explained how the proposed bubble is consistent with the area's projected attainment strategy. Nor will EPA examine, or expect states to examine in making such representations, any specific source's subjective motivation in making claimed reductions. The combined effect of these requirements will be (a) to deny bubble credit for reductions which occurred before application for credit, in recognition of the fact that reductions produced before any application to bank or trade are unlikely to have been elicited in any way whatsoever by the opportunity to trade; (b) to help assure that only actual reductions in current emissions are relied upon to satisfy pending control requirements in these areas; (c) to more systematically encourage efforts by sources to produce and permanently maintain these additional reductions, by granting them predictable bubble credit where specified baseline and other tests have been applied; and (d) to assure that these bubbles will not interfere with these areas' attainment efforts. Any other approach would enmesh EPA and state agencies in lengthy, resource-intensive, and uncertain efforts to determine subjective company motives for making particular claimed reductions—efforts which appear unlikely to provide greater environmental protection than the criteria articulated here. Cf. e.g., 48 FR at 39584 and n. 15, 39585–86.

2. Basic Rationale

EPA believes that Congress would clearly have intended the Agency to approve bubbles that, despite the lack of a complete attainment demonstration for the affected areas, nevertheless produce progress toward attainment in those areas. Section 172(b) of the Clean Air Act does require states to formulate complete control strategies to attain the standards in these areas as expeditiously as practicable and, in the case of primary standards, by certain fixed dates. It also requires these areas to demonstrate reasonable further progress toward attainment in the interim. However, SIPs and attainment demonstrations are composed of dozens, if not hundreds, of regulations and commitments adopted at the state or local level, following proceedings that often are time-consuming and overlap in sequence. If EPA were to wait until every such provision were adopted and submitted by the state before acting on any of them, substantial environmental benefits that would otherwise accrue from having each available requirement promptly incorporated in a binding manner into the SIP and made federally enforceable would be forgone. Such an "all or nothing" approach would produce less expeditious progress toward attainment than a combination of (a) EPA approvals of state provisions submitted sequentially and (b) appropriate use of sanctions authorized by the statute to effect the adoption and submittal of remaining necessary provisions. Given the strong emphases in the statute as enacted, it is doubtful that Congress would have intended the former, less progressive approach.[33]

For these reasons, EPA has decided to approve in these areas bubbles which individually produce progress, both beyond preexisting plan requirements and in the air itself, and which do not interfere with these areas' efforts to construct complete strategies that provide for attainment as expeditiously as practicable.

Today's notice accordingly disallows use in bubbles of reductions made prior to any application to bank or trade, but allows appropriate use of reductions made after such application. Where a source voluntarily proposes to make creditable reductions as part of and following a banking or trading application, the stringent lowest-of-actual-SIP-allowable-or-RACT-allowable baselines must be applied if a bubble is involved, and that bubble must meet appropriate ambient tests, using emission levels that produce overall equivalence to the emissions baseline. The "net 20%" discount in remaining emissions then applies to all sources in the bubble, and provides an additional safety margin to assure ambient progress from bubbles in these areas.[34] Finally, the state assurances

[33] See, e.g., *Chevron USA* v. *NRDC*, supra n. 4.

[34] This "net 20%" requirement is also supported by evidence indicating that for most extension area SIPs addressing ozone pollution—the most widespread remaining nonattainment health problem—a net 85% reduction (81% RACT + 20% of remaining VOC emissions) appears sufficient to produce ambient attainment, if those areas could secure such reductions from all controllable stationary sources of VOC emissions which remain after implementation of stringent controls already in place. See, e.g., "o, Attainment Status of 33 Areas Under Different Degree of Stationary Source

[26] The Agency has determined that these conclusions also apply where the post-application reduction on which the applicant relies for credit happens to be a shutdown or production curtailment. Because multiple motives similarly affect, and can determinatively "tip," decisions to close a facility or restrict its productive capacity, shutdowns that occur after the source owner applies for credit, no less than other types of post-application reductions, may be presumed reasonably elicited by the opportunity to trade. This is particularly true because the source operator, whatever its antecedent motives, must make a deliberate decision to forgo an item of substantial value—either by surrendering its operating permit or by accepting binding production limits—in order to create credit. Since it would be administratively difficult, if not impossible, to prove or disprove that opportunity to trade was the driving force or a subjective motive behind the shutdown, such a presumption is amply justified.

[26] See, e.g., 47 FR 15077, 15080; 48 FR 39580 and n. 2, 39582 and n. 7.

RACT levels are generally at least 80% or more below uncontrolled emission levels, depending on the pollutant. Where pre-trade actual emissions are higher than RACT baseline levels this requirement directly accelerates air quality progress, since no credit can be secured for the difference.

[27] Trade applications submitted over the last several years have, among other things, helped establish and verify emissions factors for nontraditional sources, as well as provide detailed emissions profiles of such sources (see, e.g., application of Shenango Iron and Steel Co., approved 46 FR 62894 (December 29, 1981)); have provided current emissions data not otherwise available to EPA through the Agency's National Emissions Data System (50 FR 25083, June 17, 1985); and have disclosed the existence of sources (or in at least one case an entire plant) that had been wholly missed in development of the state's emissions inventory. Other applications have identified and reduced previously unsuspected threats to PSD increments; helped correct substantial discrepancies between inventoried and actual emissions, or between SIP emission limits and attainment demonstrations; and helped improve enforcement procedures in certain state programs. In addition to such case-specific examples, opportunity to trade appears to reduce traditional reasons for sources to underestimate their emissions, resulting in better inventory and planning data. For example, Massachusetts requires firms to provide data on their two years of highest emissions since the design year of the SIP, in order to establish a daily emissions cap under the state's VOC bubble rule. This requirement has produced baseline data for previously unquantified emission years for some sources.

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Through all these mechanisms, bubbles can achieve substantial emission reductions and air quality planning benefits, even without special "progress" requirements.

Nowithstanding these independent progressive effects, EPA believes that it may approve bubbles in these nonattainment areas only if they meet the specific progress requirements described above and do not interfere with the affected areas' efforts to develop and implement complete attainment strategies. Such bubbles can help adjust existing inadequate regulations on a source-specific basis, help make progress toward a full-approved demonstration, and help improve air quality, without "freezing" inadequate SIP requirements that are currently in place.

Accordingly, EPA has decided to approve "progress" bubbles which are consistent with the attainment needs of these areas, which produce a net air quality benefit, and which may therefore secure faster interim progress toward attainment and more rapid development of complete attainment plans.

I. Additional Policy Changes and Clarifications

Today's notice makes numerous additional changes in response to comments on and following the 1982 policy. The most important of these changes or clarifications are discussed below.

A. Generic Bubble Rules

Today's notice recognizes the special position of EPA-approved state generic bubble rules. Such rules may provide clearer approval criteria and may result in more rapid bubble approvals with reduced expenditure of EPA and state resources, by eliminating the need for case-by-case Federal rulemaking on each bubble as an individual SIP revision.

Today's policy affirms that states may continue to use generic rules to approve bubbles within the scope of such rules in all areas of the country, including primary nonattainment areas needing but lacking approved demonstrations of attainment. It also establishes specific procedures to ensure opportunity for public comment on individual generic actions and for regular EPA oversight of the administration of all such rules. It spells out additional "progress" requirements that new generic rules must satisfy to be approvable for primary nonattainment areas needing but lacking demonstrations of attainment.

State generic bubble rules approved by EPA as SIP revisions have independent force of law and further Congress' intent that "the prevention and control of air pollution at its source [remains] the primary responsibility of States and local governments." Clean Air Act, § 101(a)(3). EPA has approved or proposed to approve 10 such rules for 9 different states, and at least 12 others are being developed. Few approved rules currently apply to primary nonattainment areas which require but lack approved demonstrations. However, today's notice requires that all generic rules meet certain additional procedural requirements in order to assure effective EPA oversight of their administration and to identify any deficiencies in individual approvals or state implementation procedures before substantial numbers of state-approved bubbles may be put at risk. To the extent these requirements require modification of existing generic rules, they may apply to rules affecting any area, not just primary nonattainment areas which need but lack demonstrations.

Today's policy is meant to assure these rules' smooth continued operation, both now and through any future transition periods, without undermining the considerable investment states have already made in generic approaches. At the same time, the policy is designed to assure that actions under generic rules will meet the policy's substantive and procedural objectives.

Basically, *bubbles approved by states under existing EPA-approved generic rules before the effective date of this policy* will not be affected or revisited due to today's changes. Because EPA-approved generic rules possess independent validity and may only be changed upon completion of specific procedures for altering such SIP provisions (see, e.g., Clean Air Act sections 110(a)(2)(H), 110(i)), states may also *continue to approve bubbles in accord with such rules*, unless and until those rules are finally changed in response to an EPA notice requesting and establishing a specific timetable for their modification. However, in order to provide maximum assurance of SIP integrity and minimize any need for future SIP corrections, EPA expects states to assure so far as feasible that generic bubbles they approve are consistent with applicable terms of today's policy as well as their generic rules. *New or pending generic rules* must all meet the terms of today's notice.

All existing generic rules which require modification to conform to this policy must, as requested by EPA, be promptly revised. EPA will review such rules and [illegible] today's requirements, and will publish Federal Register notices identifying generic rules requiring modification. These notices will identify specific deficiencies and means for correcting them, and set forth a schedule for both submittal and EPA review of revised rules. Where states fail to resolve identified deficiencies in such rules within the prescribed period, EPA may either rescind its previous approval of the rule, or issue a notice of SIP deficiency under section 110(a)(2)(H) of the Act.

1. Substantive "Progress" Requirements

Generic bubble rules applicable to *primary nonattainment areas which need but lack approved demonstrations* must provide that all generic bubbles in these areas:

(a) Use lowest-of-actual-SIP-allowable-or-RACT-allowable emissions baselines, as described above, for all sources involved in the trade;

(b) Grant credit only for those reductions occurring after an application to bank or trade credit (whichever is earlier) has been made;

(c) Incorporate replicable procedures which assure that all trades preapproved by EPA as meeting the rule will also satisfy applicable ambient equivalence tests (see Technical Issues Document, Section II.B.2.); and

(d) Produce an overall emission reduction at least equal to a net 20% reduction in emissions remaining after application of the above baselines, or at least equal (in percentage terms) to the overall emission reduction (in percentage terms) needed to attain in the area (i.e., at least equal to the source-by-source emission reductions that would be required for a full demonstration of attainment, taking into account "uncontrollable" stationary (e.g., area) sources and expected emission reductions from mobile sources), whichever is larger.[28] This last

[28] For example, assume air quality analysis indicates the area must decrease its base-year emissions by 45% to attain the relevant NAAQS. Further assume:

	TPY
(a) For the base year:	
Uncontrollable stationary source emissions (e.g., residential combustion sources)	2,500
Controllable stationary source emissions	3,500
Mobile source emissions	4,000
Total	10,000
Target emissions for attainment: 10,000 × (1.0 − 0.45)	5,500
(b) For the projected attainment year (before additional controls):	
Uncontrollable stationary source emissions (2,500 × 1.1)	2,750
Controllable stationary source emissions (3,500 × 1.2)	4,200
Mobile source emissions	2,500

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determination must be submitted with the rule, and must use the same type and quality of analysis required for an EPA-approvable SIP. In no event may the overall emission reduction required of generic bubbles in such areas be less than 20% of the emissions remaining after application of the baselines specified above; and

(e) provide assurances, in conjunction with the state's submittal of the generic rule to EPA, that the state (i) is making reasonable efforts to develop a complete approvable SIP that will achieve the percent emission reduction from controllable sources described in the previous paragraph and (ii) intends to adhere to the schedule for development of such a SIP (including dates for completion of emissions inventory and subsequent increments of progress), as stated in the letter accompanying the submittal or in previous letters. EPA believes that the numerical determination and progress requirement discussed in the previous paragraph is the functional equivalent of the additional assurances described earlier in this notice (see Section II.B.1.b above) for bubbles needing case-by-case EPA approval, since bubbles meeting this requirement will produce attainment-level reductions. For that reason, EPA does not believe that it must require the state to make those additional assurances when it submits the generic SIP limits, which remain enforceable and may make such trades the subject of remedial action after due notice by EPA to the state and source.

In addition to requiring that generic rules or other state provisions assure meaningful notice *to EPA* by the first day of the public comment period on *proposed* generic actions, and immediately upon *final* generic actions, today's policy also requires that state generic rules or other state provisions provide *the general public* adequate notice and opportunity to comment, including opportunity for judicial review sufficient to make comment effective. Existing state generic rules, statutes or regulations will generally satisfy this requirement. However, some jurisdictions, for example, deny judicial review to commenters who do not possess a direct financial stake in individual permits. Such jurisdictions will have to modify their generic rule, or other provisions, to meet this requirement.

B. Bubbles Involving Hazardous or Toxic Air Pollutants

EPA reaffirms and extends its 1982 determination that bubbles in any area must not increase emissions of hazardous or toxic air pollutants. Bubbles cannot be used to meet or avoid National Emission Standards for Hazardous Air Pollutants (NESHAPs) *that have been finally promulgated* under Section 112 of the Act. Where NESHAPs *have been proposed but not promulgated* for emitting sources which are the subject of a bubble application, the proposed NESHAP will generally serve as the baseline for determining creditable bubble reductions, and the trade must produce reductions at least as great as those which the proposed NESHAP would produce, if promulgated. Moreover, no source emitting a pollutant subject to such a proposed NESHAP may exceed emissions allowed under the proposed NESHAP as a result of the trade. Where a bubble involves a pollutant which is *listed* under Section 112, but no NESHAP has yet been proposed for the relevant source category, or a pollutant for which EPA has issued a Notice-of-Intent-to-List, there must be no net increase in actual emissions of the noticed or listed pollutant.[29] In general,

Therefore the reductions needed from controllable stationary sources are 9,450 − 5,500 = 3,950 tons/yr.

And the percent emission reduction required from controllable stationary sources to attain is

$$\frac{(3950)}{(4200)} \times 100 = 94\%$$

Thus the net overall reduction required from each generic bubble would be 94% (i.e., the reductions produced by applicable baselines (e.g., application of a RACT emission rate) plus whatever percent reduction in emissions remaining after this RACT limit is sufficient to yield the 94% total).

States that wish to avoid case-be-case SIP revisions for sources for which RACT has not yet been defined in an approved SIP provison may incorporate "presumptive RACT" values (e.g., 80% reduction for VOC) in their generic rules. Sources would than have the option of accepting these RACT values for generic bubble purposes, or negotiating different RACT values through the case-by-case SIP revison process. However, where a source involved in a trade is one for which EPA has issued a CTG, but the state has not yet adopted the CTG-specified emission rate as RACT and no RACT has yet been specified by the state for that source, the presumptive or negotiated RACT values for the trade must be at least as restrictive as the CTG-specified emission rate for that source.

[29] In some limited circumstances additional pollutants may be treated as listed pollutants. See Technical Issues Document, Section I.B.1.d.

all bubbles involving emissions of pollutants described above must use lower-of-actual-or-NESHAPs-allowable emissions baselines, and must take place within a single plant or contiguous plants.[30]

Commenters who addressed this issue divided into two general groups. One group asserted that hazardous/toxic restrictions should extend beyond pollutants currently regulated, proposed to be regulated, or listed under Section 112. These comments generally maintained that restrictions should also apply to all pollutants the Agency is "actively considering" for listing. A second group asserted that neither volatile organic compound (VOC) nor particulate emissions should be traded unless there is clear evidence that specific substances present in such VOC or particulate emissions are "relatively innocuous."

EPA has determined that for reasons of policy and administrative practicality these suggestions, while laudable in intent, should not be adopted. Bubbles are alternative means of compliance which should generally be treated no [illegible]rently than other compliance [illegible]gies, provided basic SIP r[illegible]ments of consistency with ambient needs, PSD increments, and interim progress are met. EPA's statutory authority to further restrict trades on the basis of hazardous substances which may be present in a particular criteria pollutant stream (e.g., VOCs) and which may be subject to a listing, notice-of-intent-to-list or proposed NESHAP, but are not as yet regulated under § 112, is limited. Generalized attempts to exercise such authority based on the presence of substances on which the Agency has taken no formal action whatever would be still more tenuous. Moreover, the inherent ambiguity of such terms as "actively considering" or "relatively innocuous" militates against such tests. States remain free to adopt further restrictions consistent with local laws and needs. However, with respect to national requirements EPA has concluded that clear decision points based on actions pursuant to the deliberative process and record evidence underlying section 112 determinations are to be preferred.

Interested parties should be aware, however, that under today's policy the Administrator reserves discretion to consider on a case-by-case basis whether bubble proposals involve pollutants which, while not regulated, listed or otherwise noticed under section 112, are regulated as toxic under other federal health-based statutes, and to require further analysis before approving such proposals.

One commenter expressed concern over the 1982 policy's use of the term "reasonably close" to indicate the distance which may be covered by bubbles involving pollutants listed or proposed to be regulated under section 112. EPA agrees this term is ambiguous, and with the exception of bubbles which affirmatively *decrease* such pollutants below the lower-of-actual-or-NESHAPs-allowable baseline, has substituted the more protective and certain requirement that such trades occur within a single plant or contiguous plants. In order to assure that such trades do not produce adverse health or environemental effects, today's notice also requires that they rely only on reductions below current actual or section 112 allowable emissions as of the trading application, whichever is lower, in pollutant streams containing a substance which has been noticed, listed, or proposed to be regulated under section 112.

Several of these provisions—notably the proposed NESHAPs baseline and source-specific proposed-NESHAPs emissions cap, the inclusion of pollutants subject to Notices-of-Intent-to-List, and the general limitation to contiguous plants and lower-of-actuals-or-§ 112-allowables baselines—represent substantial tightenings over the 1982 policy.

C. *Banking Emission Reduction Credits (ERCs)*

EPA-approvable emission reduction banks may allow sources to store ERCs for their own future use or use by others. Today's notice reiterates that states are by no means required to adopt banking procedures, but notes that banks may help states and communities realize important planning and environmental benefits.[31] Banks may encourage firms to create inexpensive extra reductions at earlier, optimal times (e.g., when replacing outworn control equipment or deciding how to meet new requirements) and disclose such information to state agencies. They may help create a central pool of identifiable, readily-available reductions which can ease plant modernizations or expansions, new source siting, or existing-source compliance. Properly-structured banks may reduce incentives for sources to delay, conceal or hoard actual or potential reductions until an immediate use arises. Banks may also produce other, interim environmental benefits, since banked ERCs remain out of the air (although they must be treated for SIP planning purposes as "in the air") until used. In addition, banks can help state agencies manage their permit workloads more efficiently, because portions of new source or existing-source compliance transactions may be pre-permitted or reviewed in advance. Banks may also help states systematically assure that all unused surplus reductions are treated as "in the air" for SIP planning purposes, avoiding potential inconsistencies which might cause those reductions to be lost.

Comments indicated some confusion over whether, in addition to meeting other ERC requirements, reductions must be made federally enforceable to be formally credited for banking. The answer is no. However, in order to qualify as emission reduction credits and be deposited in EPA-approvable banks, emission reductions must be made enforceable *by the state*. Reductions must be made enforceable by the state by their time of deposit in order, e.g., to better ensure the integrity of the state's air quality planning process by preventing sources from banking reductions of emissions which their permits do not preclude them from continuing to emit. This requirement will also prevent undue reliance by parties or potential parties on emission reductions which have not actually occurred.[32] However, because these

[30] The one exception involves bubbles in which surplus reductions in the emissions of pollutants subject to regulation, proposed regulation, listing, or Notice-of-Intent-to-List as hazardous emissions [illegible]ensate for increases in non-hazardous [illegible]ons. (E.g., where a source decreases benzene [illegible] below the baseline specified above, in [illegible] for corresponding increases elsewhere in a [illegible]azardous VOC.) As long as such a trade would not result in an increase in either actual or allowable emissions of a pollutant subject to the special restrictions discussed above at any source, it would not differ in nature of requirements from a trade involving only non-hazardous emissions.

[31] See e.g., 47 FR 15083–84 (April 7, 1982).

[32] In primary nonattainment areas which need but lack approved demonstrations, emission reductions made prior to application to bank or trade (whichever is earlier) will not be credited for use in bubbles (see Section I.A.1.c.(1) of today's Technical Issues Document). Following publication of today's notice, the "date of application to bank" will be the date the source submits an application to the state to make a reduction state-enforceable through or concurrent with use of a formal bank or informal banking mechanism (see section I.A.1.b.(1) of today's Technical Issues Document).

In other areas, although emission reductions cannot qualify as ERCs or be deposited in EPA-approvable banks until they are made enforceable by the state, emission reductions banked through other formal or informal banking mechanisms which do not make reductions state-enforceable by the time of deposit will still be eligible for use in future trades, so long as those reductions are made federally enforceable at time of use and all applicable requirements of the regulatory program under which they will be used are met.

Continued

actions merely create extra reductions in actual or allowable emissions which cannot by themselves produce any adverse effects on air quality, they need not be made *federally* enforceable until used.[33] Where states wish to make banked emission reductions *federally* enforceable at the time they are banked, several mechanisms may be available for doing so without case-by-case SIP revisions. States with EPA-approved PSD, NSR, visibility and preconstruction review programs can issue permits to credit reductions from emission units currently subject to these preconstruction permits.[34] States with EPA-approved generic rules may also be able to use those rules' procedures to make reductions at existing sources federally enforceable. Since only reductions in applicable emission limits are involved at the banking stage, modeling should not be required. Moreover, these reductions should automatically meet the requirement that changes in emission limits under generic rules not jeopardize ambient standards or PSD increments.

Since some trades have special requirements, banks do not guarantee the validity of particular banked ERCs for all potential uses or for all time. For example, because only actual reductions occurring at the same major stationary source are eligible for netting, banked reductions created at other stationary sources cannot be used for netting transactions. However, banked credits resulting from reductions at other stationary sources may be used as offsets or in bubbles, so long as this notice's other requirements for appropriate use of credits are observed and applicable offset requirements are satisfied.

Because of differing regulatory requirements, the amount of credit actually derived from particular emission reductions may also differ from one regulatory program to another. For example, in primary nonattainment areas needing but lacking approved demonstrations, the amount of credit available from a given reduction for bubble purposes may be less than that available from the same reduction for netting or offset purposes, since special progress requirements apply to bubbles in these areas.

Because the *use* of credits will change (rather than merely reduce) emission levels if approved, such proposals should be carefully evaluated to assure they meet all of today's criteria for appropriate use. For similar reasons proposals to *use* banked credits will usually require additional approval procedures (e.g., additional modeling for certain TSP or SO_2 trades), whether such proposals are evaluated as case-by-case SIP revisions, under EPA-approved generic rules, or under EPA-approved new source review programs.

One commenter asked how banked ERCs would be treated if a nonattainment area is being redesignated to attainment. Redesignation will have no effect on the banked ERCs, so long as state planning considered those ERCs to be *in the air* (i.e., in the inventory) at the site of their creation. Because local recessions or shifts in industrial patterns can temporarily affect air quality without regard to the adequacy of state emission-control efforts, EPA guidance requires that redesignation not be based solely on monitored air quality. In addition to considering factors such as the state of the particular economy and its effect on emissions, EPA may consider the number, type, and state inventory treatment of banked credits. Such procedures will help assure that reliably banked reductions are not reduced or otherwise adversely affected by shifts in an area's designated attainment status.

Some commenters asserted it is overly cautious to require that *all* banked emissions be considered as "in the air." One commenter asked that state planning be required to include as "in the air" only a *portion* of banked emissions analogous to a "reserve requirement." This comment drew parallels with financial banking to assume that, given withdrawals and deposits, a certain "float" quantity of ERCs would always remain in the bank and out of the air. EPA recognizes that reductions placed in banks may tend to keep the air cleaner through a relatively constant level of deposits. However, EPA cannot allow states to consider less than their full amount of banked deposits as "in the air." To do so could jeopardize air quality planning and attainment.[35]

D. OBERS Projections and Double-Counting

In its August 1983 notice EPA asked for further comment on whether some SIPs' translation of general economic growth projections provided by OBERS (Department of Commerce) directly into projected emissions growth, left "no straightforward way to disaggregate the projections into shutdowns and new plant openings." Whether such SIP demonstrations were fully or only partly approved, the notice continued, such use of OBERS might make it impossible to distinguish which shutdowns were already relied on in the demonstration. Therefore, it might be "difficult or impossible for states whose SIPs rest on OBERS projections to grant credit from shutdowns for use in existing source bubble trades, consistent with the Clean Air Act." 48 FR 39581.

Most industry and several state commenters asserted that where OBERS data were used to project needed SIP reductions, use of shutdown credits in bubbles was not a problem, since OBERS figures substantially overestimate the total amount of emission reduction needed to attain. For example, one industry commenter noted that "emissions growth will not be directly proportional to economic growth because of the installation of new environmentally efficient technologies. Therefore, SIPs which used "OBERS" projections already have

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Since states may have to revise their regulations or permit procedures in order to implement this new state-enforceability requirement, full implementation will not be expected until one year after publication of today's notice. However, all credits not made enforceable when banked during this interim period, together with all credits deposited prior to today's notice, should be made state-enforceable within eighteen months from the date of this policy.

[33] Cf. 47 FR 15076, 15081 at col. 2.

[34] Some jurisdictions may also use general state preconstruction review programs that have received EPA approval to credit reductions at existing sources if such reductions are covered under the program, since requirements under these programs are federally enforceable.

[35] In order not to defeat banking's purpose of encouraging the earliest possible disclosure and production of potential extra emission reductions, use of banked credits for bubble purposes *in primary nonattainment areas which lack approved demonstrations* will continue to be allowed, provided these credits meet all baseline and other applicable requirements of today's notice for these areas. This generally includes the lowest-of-actual-SIP-allowable-or-RACT-allowable emissions baseline, applied as of the date of written application to the state to bank such reductions through a formal bank or informal banking mechanism for use in future trades. It also includes that 20% net reduction requirement and state assurances specified above, at the time such credits are approved for use in bubbles. Banked credits resulting from *plant shutdown or production curtailments* may be used for bubbles in these areas on the same terms as use of other banked credits, provided their use is subject to stringent qualitative review to assure legal, technical and programmatic consistency with SIP planning goals (e.g., avoidance of "shifting demand"). See today's Policy at n. 24 and Section I.A.1.c(3) of the Technical Issues Document. (Banked credits resulting from certain shutdowns or production curtailments may, however, be subject to special restrictions for offset purposes. See today's Technical Issues Document at n. 14).

The special restrictions discussed above do not apply under today's notice to use of banked credit for bubble purposes in other areas.

an inherent growth potential built into them, and allowing ERCs for shutdowns in these areas will not jeopardize a state's ability to demonstrate attainment." A local agency agreed that "demonstrations . . . based on such emission projections would overestimate attainment because some growth will occur from [wholly] new sources, new sources replacing existing sources, or modified existing sources, [all of] which would be subject to . . . New Source Review rules, rather than the less stringent [SIP] requirements assumed in the emission projections."

Several state commenters also stressed that while use of OBERS projections is not widespread, the underlying question is whether the area's SIP process incorporates conditions sufficient to prevent double-counting of shutdown credits. One local agency recommended that shutdown credits be prohibited where the source involved is within an industrial category projected to go through an economic downturn, asserting that in such cases the SIP implicitly relies on the expected shutdowns. An environmental group went a step further, and urged that all shutdown credits for bubbles in areas using OBERS projections be completely prohibited.

EPA has concluded that the requirements of the 1982 policy are sufficient to prevent double-counting of shutdown credits, and should be retained without further special restrictions. First, use of OBERS or any other projection is relevant only where an area has an approved attainment demonstration. Today's notice generally disallows bubble credit for pre-application reductions (including reductions from shutdowns or curtailments) in primary nonattainment areas which require but lack such demonstrations. Thus today's notice largely moots any issue of double-counting for past shutdowns, in the areas for which this issue has been raised with the greatest concern. Second, use of OBERS projections in areas with approved demonstrations does not appear nearly so common as was assumed in EPA's 1983 request for further comment. Even where such projections were used in approved demonstrations, they generally overestimate the amount of emissions forecast to exist in the year of projected attainment. They therefore tend to produce substantially less overall reductions from source turnover than will actually occur.[36]

Finally, even if such projections did not overestimate emissions, under today's notice the state must show that use in bubbles of any reductions created by shutdowns is consistent with its attainment demonstration and that those reductions were not already assumed in its SIP. For example, the state must show that it did not implicitly or explicitly rely on a "turnover rate" from the difference in emissions between existing sources and better-controlled new sources for part of the reductions required in its SIP from that industrial category. Alternatively, it must show that if a "turnover rate" was assumed, the shutdown credits used in an individual trade result from reductions in excess of that turnover rate. Where a state regulated the sources in a standard industrial classification (SIC) without explicitly relying on turnovers, then bubble credit for a shutdown within that SCI category would not in general be double-counted.[37]

These requirements should fully protect states and sources against adverse environmental or SIP effects.

E. Improved Modeling and de Minimis Requirements

Bubble applicants must show that their proposed trades are at least equivalent in ambient effect to the SIP (or other) emission limits the bubble would replace. For some criteria pollutants (e.g., VOC or NO_x) this test may generally be met by showing equal reductions in emissions.[38] For other pollutants (e.g., SO_2, TSP or CO) it was traditionally met, prior to the 1982 policy, through ambient dispersion modeling.

The 1982 policy made available several alternatives to the use of full-scale dispersion modeling where such modeling was not needed to protect air quality. These alternatives could, in appropriate, carefully-limited circumstances, be used to demonstrate ambient equivalence for bubbles involving particulate matter or other pollutants whose ambient effects were not linearly related to emissions. They included *de minimis* levels and the use of other screening criteria to identify circumstances in which full-scale modeling was unnecessary, either for bubbles processed as SIP revisions or those approved under generic rules.

Today's notice both tightens some of these screening criteria and expands the circumstances in which such criteria can be used.

Today's notice also specifies certain conditions and types of case-by-case SIP-revision bubbles for which EPA Regional Offices may require additional technical support, beyond basic modeling requirements, deemed necessary to protect NAAQS, PSD increments or visibility where allowable values used to calculate baseline emissions are not clearly used or reflected in an approved demonstration, or may not reasonably be assumed consistent with the need to protect PSD increments or visibility. See Technical Issues Document, Section I.A.1.a.

1. De Minimis Levels

Under the 1982 policy, trades in which net baseline emissions did not increase and in which the sum of emission increases, looking only at the increasing sources, totaled less than 100 tons per year (TPY) after applicable control requirements, could be exempted from SIP revisions under an approved generic rule. The rationale for this approach was that EPA regulations implementing the Clean Air Act already allow some exemptions from NSR requirements for new sources which are not defined as "major"—i.e., which do not have potential emissions greater than 100 TPY. See e.g., CAA section 302(j) and 40 CFR 52.21(b)(1) and 51.18(j)(1)(v). Thus trades which merely shift lesser amounts of emissions, and which are

[36] This is so because OBERS-based SIP projections assume that units of production (and hence emissions) in particular SIC Codes will keep pace with projected trends in earnings and/or employment in those SIC codes, without regard to changing distributions between new and existing sources. See, e.g., *1980 OBERS: BEA Regional Projections, Volume 1: Methodology, Concepts and State Data*, p. (xi), U.S. Department of Commerce (July 1981).

[37] Such credits must of course meet all other requirements of today's notice, including application of appropriate baselines and other criteria defining surplus reductions, before they may be used in a bubble trade.

States which expressly relied on OBERS projections may also show that no double-counting occurred by demonstrating that they did not implicitly rely on any turnover credits. This showing should not be difficult to make because OBERS assume that emissions will evenly increase at each plant and production line, proportionate to growth in earnings and employment potential for that SIC code. Cf. n. 36 above. This assumption neither anticipates nor relies on the fact that any shutdown will occur.

The one exception to these general principles could occur where a SIP relied on OBERS projections for an SIC category predicted to undergo a *quantified* future economic downturn, without taking explicit affirmative steps to preclude reliance on that downturn. In these circumstances the state would either have to show that a proposed shutdown credit from a source within that SIC category was not double-counted (e.g., by showing that more shutdown reductions than projected for the SIC category had already occurred), or deny credit.

[38] Interested parties should, however, be aware that ambient equivalence considerations which apply to SO_2, TSP and CO, as described below, also apply to NO_x trades involving visibility impacts from elevated plumes. See Section I.B.1.b. of today's Technical Issues document.

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iources required to evaluate these
des could best be used to evaluate
tions that have a potential impact on
quality." 47 FR at 15085.[39]

One commenter asserted that this 100
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marily noted that EPA had already
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regulations for PSD, for NSR
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nattainment areas, and in visibility
mit regulations, and that emission
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other might still be too large to go
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b. air quality, today's notice
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Modeling Requirements[41]

umerous comments were received
he 1982 policy's three-level approach to demonstrating ambient equivalence. The vast majority sought added clarification, stating, for example, that the 1982 policy did "not adequately delineate the level of modeling necessary in each instance." Today's notice tightens and clarifies the conditions under which ambient equivalence may be demonstrated with less than full-scale modeling.

a. Level I Criteria. Under the 1982 document no modeling was generally required of SO_2, TSP, or similar trades where applicable net baseline emissions did not increase, sources were located in the same immediate vicinity (generally within 250 meters of each other), and the taller stack was the one which increased its emissions. These conditions were believed sufficient to assure that local ambient concentrations of the relevant criteria pollutants would not increase as a result of the trade.

EPA has added two criteria to those specified in 1982, in order to provide additional assurance that trades approved under Level I will have no adverse ambient effect. First, there must be no complex (e.g., mountainous) terrain within 50 kilometers of the trading sources or within the trade's area of significant impact, whichever is less. (For simplified methods of determining "area of significant impact," see today's Technical Issues Document, Appendix E). Second, stacks with increasing baseline emissions must be sufficiently tall to avoid downwash.

Some industry commenters objected to the 250-meter limitation, advocating use of either trade ratios for sources beyond that distance, or an 800-meter limit extrapolated from unrelated EPA regulations.[42] EPA has retained the 250-meter limit as substantially more consistent with the modeling screen's original intent of simplifying modeling requirements for trades which could not jeopardize ambient equivalence.[43]

b. Level II Criteria. Trades of SO_2, TSP, CO, Pb and NO_x (for visibility purposes) may also be approved through limited Level II modeling of the ambient effects *solely of sources involved in the trade*, where applicable net baseline emissions do not increase and designated ambient significance levels are not exceeded.

Today's notice confirms, clarifies, and in certain cases extends various 1983 improvements made to increase certainty and better assure that such Level II trades result in ambient equivalence. In particular, "significant ambient impact" may no longer be measured solely by changes at the "receptor of maximum predicted impact" before and after the trade. Instead such changes must be measured at every affected receptor for every averaging period relevant to the particular pollutant, throughout the year. Under this approach no Level II trades will be approved without further scrutiny, involving full or limited Level III modeling, if they result in a significant net ambient effect at any modeling point for any such averaging period during a modeled year.

Today's notice also specifies Level II significance levels for all averaging periods consistent with all current national ambient air quality standards, not just the 24-hour averaging periods for SO_2 and PM or the 8-hour averaging period for CO.[44] Refined models such as MPTER and ISC must generally be used to measure changes resulting from the trade at each receptor, using the most recent full year of meteorological data.[45]

These modeling requirements assure that bubbles which pass applicable Level II tests and meet all other requirements of today's policy will result in air quality equal to or better

The 1982 document did, however, note that "[generic] trades are still subject to ambient [at the *state* level, and] . . . should dingly be evaluated by the state under the ling screen . . . or an equivalent approach." : 15085 at n.7.
This should not be construed to imply that *new* es and modifications need not meet all cable requirements, including those specified r 40 CFR 51.18 or parallel EPA-approved state

owing discussion summarizes both a ovements made in the 1982 modeling n (see Technical Issues Document, Appendix d EPA's responses to major comments on ling issues.

[42] See e.g., 47 FR 5864, 5865 (February 8, 1982).

[43] Trade ratios may already be used under general provisions inviting states to design other equivalent approaches which adequately address ambient concerns. See., e.g., 47 FR at 15077 and n.2, 15078. However, to be approved by EPA such ratios would generally have to be defined through area-wide advance modeling of all sources, as well as those likely to trade.

Several comments also objected to the requirement that Level I trades not increase emissions from the source with the lower effective plume height. These comments noted that under various conditions similar stacks could so vary in effective plume height that neither would consistently be "higher" or "lower." One also suggested this limitation might encourage use of tall stacks to cure local exceedances.

Today's notice retains this Level I requirement unchanged. That two sources may be virtually indistinguishable in effective stack height should not delay approval of Level I trades, since the limitation's purpose—preventing potentially significant increases in ground-level ambient concentrations due to shifts of emissions from "higher" to "lower" stacks—will still be satisfied. Moreover, since such trades cannot increase net baseline emissions, this limitation merely ensures they will not create *new* ambient violations. Because other EPA regulations address the use of excessively tall stacks to cure *existing* ambient violations, no further restriction in this Level I requirement appears required.

[44] For further discussion of these significance levels and the increased assurance of environmental equivalence they provide in conjunction with today's more sophisticated Level II modeling approach, see Fleckenstein, "Modeling Criteria; The Key to Major Reforms for Emissions Trades," APCA Paper 84-65.2 (San Francisco, California, June 28, 1984).

[45] Under some limited conditions, conservative screening models may be substituted for these refined models, and in these cases a full year of meteorological data may not be necessary. See Technical Issues Document, Section I.B.1.b.(3).

than that produced by pre-trade emission limits, and may be approved. Because refined models have now been approved by EPA and their parameters may be specified with greater certainty and confidence, these requirements also provide a firmer basis for approving state generic rules incorporating Level II.[46]

c. *Level III Criteria.* Trades which are not *de minimis* and do not satisfy Level I or Level II above must generally be evaluated by full-scale ambient dispersion modeling. Two air pollution control agencies recommended fixed trading ratios in lieu of such modeling, asserting this would reduce cost and uncertainty while continuing to meet the goals of the Clean Air Act. EPA recognizes the legitimacy of these concerns but has concluded that trades which do not satisfy Level I or II raise the kinds of air quality issues which appropriately require full-scale modeling, unless such trading ratios have been justified by similar area-wide modeling conducted in advance of the trade.

Today's notice does, however, modify Level III to provide states and sources more flexibility in this regard. Where a trade meets all other criteria of Level II, but Level II modeling has shown significant potential increases at particular receptors, modeling analyses under Level III may under appropriate circumstances be limited to a receptor area smaller than the trade's entire area of impact, so long as it includes emissions from all sources which contribute to ambient concentrations in that limited geographic area. Because of the unique nature of each situation, the appropriate limited geographic area must be determined in accord with EPA guidelines on modeling and case-by-case evaluation. This "limited Level III" approach may conserve significant resources, while allowing states and sources to focus on specific geographic areas of concern.[47]

F. Enforcement Issues

Several commenters noted that while sources should, as provided in the 1982 policy, be allowed to use bubbles to come into compliance, bubble applications might also be used to delay compliance or enforcement without compensating environmental benefits. Some of these commenters alluded to language in the 1982 notice which, while not authorizing or intended to authorize such results, could have been interpreted to allow them. Such unacceptable delay might, for example, arise where a source facing an imminent compliance deadline suddenly advances a bubble application and asserts that more time is needed to develop and evaluate that application before compliance with original SIP limits should be required.

Both bubbles and generic rules can be important means of allowing environmentally-sound compliance. Generic rules may be more expeditious than case-by-case SIP revision bubbles. They may also preserve the very opportunity to bubble when the time needed to process a case-by-case SIP revision might extend beyond the source's original SIP compliance date. At the same time, bubble applications should not become a shield against enforcement actions for sources which have failed to take necessary steps to meet required control obligations on time. Bubbles are simply alternative means of complying at less cost. They should be treated neither more nor less stringently than other, more traditional methods of compliance. Bubbles offer innovative ways to meet emission reduction obligations. They should not become devices to avoid such obligations.

Today's notice substantially clarifies and tightens the 1982 policy to better implement these principles. Among other steps, compliance extensions will no longer be granted under generic rules in any nonattainment area, and may be granted generically in attainment areas only where EPA has approved the time-extension portion of the rule as consistent with relevant Clean Air Act requirements, including expeditious attainment and maintenance of ambient standards. Cf. 47 FR at 15078 col. 2. This will generally mean that requests for time extensions as part of bubble applications must be separately reviewed as individual SIP revisions, subject to criteria EPA normally applies to such requests.

Today's notice also re-emphasizes that as a matter of law and sound policy, sources seeking bubbles remain subject to enforcement of existing (pre-trade) SIP limits until the bubble is finally approved. Sources which possess approved bubbles with future effective dates remain subject to similar enforcement of pre-trade limits until either those limits or the new ones are met, and may wish to take steps identified in the notice, including accelerated compliance with bubble limits, to minimize that possibility. See Technical Issues Document, section I.B.2.a.

Under today's notice, EPA will not specifically select such sources for enforcement action. Nor will EPA withhold or defer enforcement simply because a source is seeking alternative emission limits through a bubble. In exercising its inherent enforcement discretion, EPA will apply the same considerations to noncompliant sources which seek to comply through bubbles, as to those which do not.[48]

Emissions Trading Policy Statement

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[46] Interested parties should, however, be aware that because of replicability concerns related to application of any approach requiring use of case-specific ambient dispersion modeling, such Level II generic rules may be more difficult to draft and implement than rules incorporating only *de minimis* and Level I approaches for SO_2, TSP, CO or Pb. During and after issuance of the 1982 interim policy EPA staff drafted and informally circulated, at the request of state and local air agency directors, model generic rules which provided more detail to help interested states acceptably address these concerns. The Agency plans to update and recirculate those model rules as quickly as possible after publication of today's notice. EPA encourages parties wishing to develop generic rules to use these new models and work closely with relevant Regional staff, so that potential problems may be promptly identified and resolved.

[47] Today's notice also requires bubble trades in certain primary nonattainment areas needing but lacking approved demonstrations to produce a "net air quality benefit," which shall consist at minimum of a 20% reduction in emissions remaining after application of the lower-of-actual-SIP-allowable-or-RACT-allowable emissions baselines to all sources involved in the bubble. See, e.g., Section II. B above. This requirement does not entail any modeling different than or in addition to the modeling approaches discussed above. It is merely intended to ensure that where appropriate levels of modeling indicate that prescribed baseline values are not sufficient to produce ambient equivalence, additional reductions which assure such equivalence prior to the 20% net discount in baseline emissions, will be required.

[48] States and sources should, however, be aware that under current EPA guidance, such discretion is most likely to be exercised where a SIP-revision bubble has been formally proposed for approval at the state level and EPA staff have concluded that it appears approvable under current EPA policy. In these circumstances initiation of action to enforce pre-trade limits that would soon be replaced by a valid bubble reconfiguration would likely consume limited EPA enforcement resources to little environmental end.

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EMISSIONS TRADING POLICY STATEMENT

I. Introduction: Basic Elements of Emissions Trading

This statement details EPA policy on emissions trading. It sets out conditions EPA considers necessary for emissions trades to satisfy the Clean Air Act. It also clarifies and otherwise makes final the Interim Policy proposed on April 7, 1982 (47 FR 15076). It is accompanied by a Technical Issues Document which elaborates and provides greater detail on principles set forth below. Finally, it addresses new issues, and incorporates certain additional safeguards as a result of past trading experience, to better assure the environmental integrity of future trades.

A. What is Emissions Trading?

Emissions trading consists of bubbles, netting, emission offsets, and emission reduction banking. These steps involve creation of surplus emission reductions at certain stacks, vents or similar sources of emissions and use of these emission reductions to meet or redefine pollution control requirements applicable to other emission sources. Such emissions trades can provide more flexibility to meet environmental requirements, and may therefore be used to reduce control costs and encourage faster compliance. Moreover, by developing "generic" trading rules (see Section III below) states[1] may be able to expedite bubble approvals by eliminating the need for case-by-case SIP revisions[2] and by providing more predictable approval criteria.

B. The Bubble

EPA's bubble lets *existing* plants (or groups of plants) increase emissions at one or more emission sources in exchange for compensating extra decreases in emissions at other emission sources. Approved bubbles give plant managers the ability to implement less costly ways of meeting air quality requirements. To be approvable, each bubble must produce results which are equivalent to or better than the baseline emission levels in terms of ambient impact and enforceability. Thus, bubbles should jeopardize neither ambient standards nor applicable PSD increments and visibility requirements. Under EPA's bubble, emission reductions from existing sources can not be used to meet technology-based requirements applicable to new or modified stationary sources.

This Policy Statement replaces EPA's original bubble policy (December 11, 1979; 44 FR 71779) and Interim Emissions Trading Policy (47 FR 15076). It tightens general bubble principles as well as requirements for bubbles in primary nonattainment areas which require but lack demonstrations of attainment, and requires bubbles in these areas to produce progress towards attainment, beyond equivalence to stringent emission limits. By specifying EPA's requirements for bubbles in all areas, this Policy Statement should make the development, review and approval of environmentally-sound bubbles more rapid and predictable.

C. Netting

Netting may exempt "modifications" of existing major sources from certain preconstruction permit requirements under New Source Review (NSR), so long as there is no net emissions increase within the major source or any such increase falls below significance levels.[3] By "netting out," the modification is not considered "major" and is therefore not subject to associated preconstruction permit requirements for major modifications under 40 CFR 51.18, 51.24, 52.21, 52.24, 52.27, or 52.28. The modification must nevertheless meet applicable new source performance standards (NSPS) national emissions standards for hazardous air pollutants (NESHAPs), preconstruction applicability review requirements under 40 CFR 51.18(a)-(h and (l), and SIP requirements.

Netting's scope is determined by the definition of "source" for review of major modifications. In general, PSD areas use a single, plantwide definitio allowing actual emission reductions anywhere in a contiguous plant to compensate for potential emission increases at individual emitting units within the plant. Nonattainment areas can choose either this single, plantwid definition or a dual definition, so long the definition selected does not interfe with attainment and maintenance of NAAQS and is consistent with progre towards attainment. Under the plantwide definition, significant net actual increases at the plant as a wh will trigger new source review. Und the dual definition, significant increa at either the plant as a whole or individual emitting units will trigger ne source review.

In addition to these federal definitio for major new sources and modifications, state preconstruction permits for major or minor new source and modifications may be required under 40 CFR 51.18(a), and some state preclude netting.

D. Emission Offsets

In *nonattainment* areas, major new stationary sources and major modifications are subject to a preconstruction permit requirement that they secure sufficient surplus emission reductions to more than "offset" their emissions. This requirement is designed to allow industrial growth in nonattainment areas without interfering with attainment and maintenance of ambier air quality standards. It is currently implemented through SIP regulations adopted by states to meet the requirements of 40 CFR 51.18(j).

In *attainment* areas, some new sources and modifications might not otherwise be able to be constructed because their emissions would resul

[1] "States" includes any entity properly delegated authority to administer relevant parts of a State Implementation Plan (SIP) under the Clean Air Act.

[2] "Case-by-case SIP revision" means case-by-case approval by EPA as a SIP revision. This is the traditional mechanism by which bubbles and other SIP changes have been approved by EPA.

[3] See, e.g., 40 CFR 51.18(j)(1)(x), 51.24(b)(23), 52.21(b)(23). See also today's Technical Issues Document, n. 47 and accompanying text.

On November 7, 1986, EPA restructured CFR Part 51 and renumbered many of that Part's sections (51 FR 40856). Because most readers will be more familiar with prior designations, today's notice contains citations based on the organization of Part 51 as it existed before this restructuring. Interested parties may use Appendix F of today's Technical Issues Document to convert today's Part 51 citatio to the corresponding new ones.

an exceedance of the applicable PSD increment or ambient air quality standard, would significantly contribute to a violation of an ambient air quality standard in a designated primary nonattainment area, or would significantly contribute to visibility impairment in a Federal Class I area. These sources may use emissions offsets to allow desired growth while protecting that increment, standard, or visibility.

E. Emission Reduction Banking

Firms may store qualified emission reduction credits (ERCs) in EPA-approvable banks for later use in bubble, offset or netting transactions. Depending on the bank's rules, banked ERCs may also be sold or transferred to other firms which seek to meet certain regulatory requirements by use of emissions trades.

EPA's revised Offset Ruling (40 CFR Part 51, Appendix S) allows states to establish banking rules as part of their SIPs. This Policy Statement and accompanying Technical Issues Document detail the necessary components of a complete state banking rule approvable under the Clean Air Act. While many areas also allow banking of emission reductions for various purposes through various formal or informal banking mechanisms, banks which do not meet today's criteria (e.g., by not making banked emission reductions enforceable by the state by the time the reductions are actually banked, or by not assuring that deposits are taken explicitly into account for SIP planning purposes) cannot qualify emission reductions as ERCs, and may offer substantially less protection in the event of future SIP corrections or changes in ambient attainment status.

F. Generic Trading Rules

Generic rules adopted as part of the SIP can authorize states to approve certain types of individual transactions without the need for case-by-case SIP revisions or associated federal review prior to approval. The first state generic bubble rule was approved by EPA April 6, 1981 (46 FR 20551). For the current scope of permissible rules, see Section III below.

G. Effect of This Policy Statement

Emissions trading is largely voluntary: no source is required to trade, and no state is required by EPA to approve a particular trade or to adopt a generic rule. Trading merely offers states and stationary sources alternative ways to meet regulatory requirements. For example, states are free to adopt generic rules or continue to implement trades as individual SIP revisions. They may adopt rules which incorporate all or any combination of the above trading approaches.[4]

This Policy Statement is accompanied by a Technical Issues Document for use by states and industry in further understanding emissions trading. The Document offers elaboration and important detail on requirements and available options under the Clean Air Act.

This notice reflects the current Clean Air Act and existing EPA regulations. A policy statement cannot legally alter such requirements. However, this notice establishes EPA policy in areas not governed by applicable regulations and sets out general principles which may help states and industry apply those regulations in individual cases. Federal or state rulemaking in response to, e.g., future litigation or changes in ambient standards, attainment status, or SIP validity, may affect states or firms that plan to engage or have engaged in emissions trading activities.

Nothing in today's notice alters EPA new source review requirements or exempts owners or operators of stationary sources from compliance with applicable preconstruction permit regulations in accord with 40 CFR 51.18, 51.24, 51.307, 52.21, 52.24, 52.27, and 52.28. Interested parties should, however, be aware that bubble trades are not subject to preconstruction review or regulations where these trades do not involve construction, reconstruction, or modification of a source.

EPA intends to apply changes made by today's policy prospectively (e.g., not to actions which have already been approved as case-by-case SIP revisions or under generic rules). If, however, ambient violations are discovered in an area where EPA has approved a trade, or if other violations of Clean Air Act requirements are discovered in that area, sources involved in the trade should be aware that they are potentially subject to requirements for additional emission reductions, just as are all other sources in the area.

This policy requires that substantial additional reductions (at least 20%) in emissions remaining beyond applicable baselines be produced by future bubbles in primary nonattainment areas which require but lack approved demonstrations of attainment. However, applications for bubbles in such areas which are still pending at EPA without formal action under the 1982 policy, or which were previously submitted to EPA Regions under the 1982 policy but not accepted for evaluation, will be reexamined and processed for approval if they meet the requirements of the 1982 policy and contribute to progress towards attainment. "Progress towards attainment" means some extra reduction beyond equivalence to a lowest-of-actual-SIP-allowable-or-RACT-allowable emissions baseline, with this baseline applied as of the time applicants originally sought credit. Pending bubbles in attainment areas and nonattainment areas with approved demonstrations of attainment will be processed for approval if they meet the requirements of the 1982 policy and show that ambient standards, PSD increments and visibility will not be jeopardized.

For further discussion on pending bubbles see Section I.A.1.b.(4) of the Technical Issues Document.[5]

II. Requirements for Creating, Using, or Banking Emission Reduction Credits[6]

A. Creating Emission Reduction Credits

Emission reduction credits (ERC's) are the common currency of all trading activity. ERCs may be created by reductions from either stationary, area, or mobile sources. To assure that emissions trades do not contravene relevant requirements of the Clean Air Act, only reductions which are *surplus, enforceable, permanent,* and *quantifiable* can qualify as ERCs and be banked or used in an emissions trade.

[4] Some requirements *underlying* emissions trading are not voluntary. For example, construction of a major new source or major modification in a nonattainment area requires sufficient existing-source reductions to constitute "reasonable progress toward attainment" despite the new emissions (40 CFR 51.18(j); Part 51, Appendix S). However, where the area has an established "growth margin" of extra reductions in a SIP which is currently approved by EPA, the state may provide the offsets from that growth margin rather than require them from the source, so long as it reduces the margin accordingly. See Clean Air Act section 173(1)(A) and (B)

[5] EPA encourages states or sources which submitted bubbles that were returned without evaluation by EPA to resubmit them under these criteria, provided they can document (a) formal, timely submittal of an application to EPA in accord with normal EPA procedures and (b) that the application was returned without evaluation, rather than rejected for failure to meet the terms of the 1982 policy. Bubble applications which were accepted for evaluation but rejected for failure to meet the 1982 policy will be treated as new applications under today's notice.

[6] Because this Policy Statement and accompanying Technical Issues Document reflect general Clean Air Act principles, states, individual sources, or commenters on specific rulemaking actions are free to show that a general principle does not apply to particular circumstances or could be satisfied using approaches other than those described. States, sources and commenters have this option under current law, and nothing in this Policy Statement or the Technical Issues Document restricts their opportunity to make such showings.

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1. *Surplus.* At minimum, only emission reductions not required by current regulations in the SIP, not already relied on for SIP planning purposes, and not used by the source to meet any other regulatory requirement, can be considered surplus. To determine the quantity of emission reductions that are surplus, the state must first establish an appropriate emissions baseline from which surplus reductions can be calculated. Baseline emissions for any source are the product of three factors—emission rate, capacity utilization, and hours of operation.[7]

In attainment areas, the lower of actual or allowable values must generally be used for each of these baseline factors. However, allowable values for one or more of these factors, when higher than actual values, may be used in calculating the baseline emissions, provided those values are shown to be used or reflected in an approved demonstration.[8] The burden of meeting this test by written evidence rests with the state or applicant which seeks to use an allowable value.

When allowable values for one or more baseline factors are not used or reflected in an approved demonstration, such values may still be used in calculating baseline emissions. However, in such cases applicants must perform appropriate modeling to demonstrate that allowable values which are higher than actual values will not delay or jeopardize attainment and maintenance of ambient standards.[9]

In attainment areas where the PSD baseline has been triggered, credit may be granted consistent with the PSD baseline concentration as specified in 40 CFR 51.24(b)(13) and 52.21(b)(13). This will generally require use of actual values for each of the baseline factors. *However,* states may use allowable values if they show through appropriate modeling [10] that attainment and maintenance of neither the ambient standards nor applicable PSD increments will be jeopardized, and quantify the amount of increment consumed.

In nonattainment areas with approved demonstrations of attainment, the baseline must be consistent with assumptions used to develop the area's demonstration. This generally means that actual values must be used for each baseline factor where actual values were used for such demonstrations, and that higher allowable values for these factors may be used where allowable values were used for such demonstrations.[11] The burden of showing that an allowable value was used or reflected in the approved demonstration rests with the state or applicant which seeks to use an allowable value. In the absence of written evidence to that effect, full Level III modeling would be required to make use of an allowable value in baseline calculations.[12]

In primary nonattainment areas which need but lack approved demonstrations of attainment, states must show that bubbles meet special "progress" requirements designed to produce a net air quality benefit. This must be demonstrated by (1) using the lowest-of-actual-SIP-allowable-or-RACT-allowable emissions baseline for each source involved in the trade; [13] (2) meeting the ambient equivalence tests outlined in sections II.B.2 of this Policy and I.B.1.b. of the Technical Issues Document; and then (3) producing a substantial net reduction in actual emissions (i.e., a reduction of at least 20% in the emissions remaining after application of the baseline specified above). The state must also provide assurances that the bubble is consistent with ambient progress and future air quality planning goals.[14]

2. *Enforceable.* To assure that Clean Air Act requirements are met, each transaction which revises any emission limit upward must be approved by the state and be federally enforceable. Means of making emission limits federally enforceable include SIP revisions (see section IV below), EPA-approved generic bubble rules (see Section III below), and new source preconstruction permits issued by state under EPA-approved SIP regulations pursuant to provisions of 40 CFR 51.18, 51.24, or 51.307, as well as construction permits issued by EPA or delegated states under 52.21.[15] Bubbles should be incorporated in an enforceable compliance instrument which requires recordkeeping based on the averaging period over which the bubble is operating, so it may easily be determined over any single averaging period that bubble limits are being met.

3. *Permanent.* Only permanent reductions in emissions can qualify for credit. Permanence may generally be assured by requiring federally enforceable changes in source permits or applicable state regulations to reflect a reduced level of allowable emissions.

4. *Quantifiable.* Emission reductions must be quantifiable both in terms of *estimating* the amount of the reduction and *characterizing* that reduction for future use. Quantification may be based on emission factors, stack tests, monitored values, operating rates and averaging times, process or production inputs, modeling, or other reasonable measurement practices. The same method of calculating emissions should generally be used to quantify emission levels both before and after the reduction.

B. *Using Emission Reduction Credits*

ERCs may be used by sources in bubble, offset or netting transactions. The general principles below will assure

[7] For further discussion of these factors as they relate to baseline calculations, see Appendix B of the Technical Issues Document.

[8] This statement does not apply to netting, where "contemporaneous" actual emissions are always the baseline. See, e.g., 40 CFR 51.24(b)(3).

Bubbles in areas with demonstrations based only on qualitative judgments (e.g., the "example region" approach or no technical support) ordinarily may not rely, without appropriate modeling, on allowable values in calculating baseline emissions. However, bubbles in areas with demonstrations based on rollback or dispersion modeling may use allowable values that are reflected in the demonstration. In certain circumstances an allowable baseline value specified in a preconstruction permit may be deemed equivalent to one used or reflected in an approved demonstration. See Technical Issues Document, n. 7.

For further definition of "actual" and "allowable" see today's Technical Issues Document, Section I.A.1.a. and Appendix B.

[9] This demonstration would require a Level II modeling analysis, in accord with the modeling screen discussed below, using actual emissions for the pre-bubble case, unless, for *bubbles processed as case-by-case SIP revisions,* the Region determines that additional technical support is needed to protect applicable standards or increments. For discussion of Level II modeling, see Technical Issues Document, section I.B.1.b.(3). For further discussion of additional technical support which Regions may require in these circumstances, see Technical Issues Document, Section I.A.1.a. For a discussion of parallel modeling requirements for use of such higher allowable values in attainment areas under *generic rules,* see Technical Issues Document, n.31.

[10] See n.9 above.

[11] For netting, "contemporaneous" actual emissions are always the baseline. See, e.g., 40 CFR 51.18(j)(1)(vi).

[12] For further discussion of Level III modeling, see Technical Issues Document, section I.B.1.b(4).

[13] For purposes of today's notice, the "lowest-of-actual-SIP-allowable-or-RACT-allowable" emissions baseline means the product of (1) the lowest of the actual emission rate, the SIP or other federally enforceable emission limit, or a RACT emission limit, and (2) the lower of actual or allowable capacity utilization and hours of operation. For further discussion of this baseline, see Appendix B of today's Technical Issues Document.

[14] The specific assurances may be found in the Technical Issues Document at I.A.1.b.(3). EPA will not second-guess such state assurances, provided they are: (1) A substantial test applied by the state to each bubble, and (2) the state has explained how the proposed bubble is consistent with the area's projected attainment strategy. This authority has not been delegated with EPA. See Clean Air Act section 301(a)(1), 42 U.S.C. 7601(a)(1).

[15] EPA is also considering generic steps which would make state operating permits federally enforceable. Prior to use, *banked* credits need not be made federally enforceable. See Section II.C. below.

that all uses of ERCs are consistent with ambient attainment and maintenance considerations under the Clean Air Act. They are further articulated in the accompanying Technical Issues Document.

1. *Emissions trades must involve the same criteria pollutant.* An emission reduction may only be traded against an increase in the same criteria pollutant. For example, only reductions of SO_2 can be substituted for increases of SO_2.

2. *All uses of ERCs must satisfy applicable ambient tests.* The Clean Air Act requires that all areas throughout the country attain and maintain national ambient air quality standards and meet applicable ambient requirements relating to PSD increments and Class I protection, including visibility. The ambient effect of a trade depends on the dispersion characteristics of the pollutant involved. With the exception of visibility for NO_x, dispersion considerations will generally not affect trades involving VOC or NO_x, whose impacts occur across broad geographic areas. For these pollutants "pound for pound" trades may be treated as equal in ambient effect where all sources involved in the trade are located in the same control strategy demonstration area, or where the state otherwise shows such sources to be sufficiently close that a "pound for pound" trade can be justified. However, dispersion characteristics are important for bubble and offset trades of SO_2, particulates, CO, or lead, whose ambient impact may vary with where the emission increases and decreases occur. To assure ambient equivalence, such trades of these pollutants must satisfy ambient tests under the modeling screen discussed in the Technical Issues Document or under a similar, equally effective approach.[16]

3. *Bubbles must not increase hazardous pollutants.* Bubbles may not be used to meet applicable requirements of National Emissions Standards for Hazardous Air Pollutants (NESHAPs) promulgated under section 112 of the Clean Air Act, to increase emissions at any source beyond the levels applicable NESHAPs prescribe, or to create any net increase in baseline emissions of a pollutant regulated under section 112. The applicable baseline for regulated sources is the lower of actual or NESHAPs-allowable emissions of the hazardous pollutant.

Where a NESHAP has been *proposed* but not yet promulgated for a source category which emits a pollutant listed under section 112, the proposal will serve as an interim guideline for evaluating the effects of any proposed emissions trade involving a source that would be subject to the proposed standard. In general, such trades will be approvable with respect to the emissions component of the trade subject to the proposal, so long as they result in emission limits at each source emitting the relevant pollutant which are equivalent to or lower than those the proposed NESHAP would have required if already promulgated.[17]

Where a pollutant has been *listed* under section 112 or where EPA has published a Notice-of-Intent-to-List, but no regulations for the source category involved in the trade have yet been proposed or promulgated, the trade will generally be acceptable with respect to the emissions component of the trade subject to notice or listing, if there is no net increase in actual emissions of that pollutant as a result of the trade.[18]

Any trade involving sources or source categories subject to the preceding subparagraphs must take place within a single plant or contiguous plants, and must credit only reductions below current actual or NESHAPs—allowable emissions, whichever is lower. But cf. generally n. 6 above and today's Technical Issues Document, section I.B.1.d.

Trades which do not meet the special restrictions discussed in this section may also be approved where surplus reductions in the pollutants addressed above compensate for increases in non-hazardous emissions of the same criteria pollutant (e.g., benzene, a hazardous VOC, is reduced to create credits for an increase in non-hazardous VOC emissions.) As long as such a trade would not result in an increase in either actual or allowable emissions of a pollutant subject to the preceding paragraphs at any source, it would not differ in nature or requirements from a trade involving only nonhazardous VOC emissions.

4. *ERCs from existing sources cannot be used to meet technology-based requirements applicable to new sources.* Under Clean Air Act section 111 and EPA implementing regulations, new affected facilities must satisfy technology-based New Source Performance Standards (NSPS), regardless of the attainment status of the area in which they are located. Under sections 165 and 173 and EPA implementing regulations, new or modified major stationary sources must also satisfy technology-based control obligations associated with pre-construction permits. These requirements prohibit use of credits from existing sources to meet or avoid applicable NSPS, and bar use of such credits to meet applicable new source review requirements for best available control technology (BACT) in PSD areas, or lowest achievable emission rate control technology (LAER) in nonattainment areas.[19]

5. *States may approve bubbles in primary nonattainment areas which require but lack approved demonstrations of attainment,* provided such trades meet requirements designed to produce a net air quality benefit and the state provides certain assurances. See section II.A.1. above and the Technical Issues Document, section I.A.1.b. Bubbles which meet these objective requirements will be processed for approval by EPA.

6. *Sources need not be subject to binding compliance schedules based on current SIP requirements* before they can apply for a bubble which would supersede those requirements. Sources that are *already* subject to binding compliance schedules should be aware, however, that such schedules remain fully enforceable until a bubble affecting the schedule has been approved by EPA or under a state generic rule and the

[16] For similar reasons, bubbles of these pollutants must involve sources which are in the same or adjacent control strategy demonstration areas within the same general air basin.

See section II.A.1. above and Technical Issues Document. Section I.A.1.a regarding additional technical support required for certain trades in attainment areas.

While bubbles in primary nonattainment areas which need but lack approved demonstrations of attainment must produce a net air quality benefit, this does not entail additional ambient tests. Such bubbles must first meet the general tests under the modeling screen showing ambient equivalence for bubbles, prior to producing the required additional reductions. They must then produce additional reductions of at least 20% beyond the applicable baseline emissions used to demonstrate ambient equivalence. Since these additional reductions will necessarily reduce ambient concentrations below equivalence at some receptors, while continuing to meet the tests for ambient equivalence at all others, a net air quality benefit should occur and no additional ambient showings, beyond those generally required for all bubbles, are required.

[17] The allowable emission rate for a source subject to a proposed NESHAP is the limit stipulated in the proposal.

[18] Where EPA has issued a "Notice-of-Intent-Not-to-Regulate" one or more source categories for a listed pollutant, emissions of that pollutant from the unregulated source category will nevertheless be treated the same as emissions of any other listed pollutant. Under limited circumstances, similar treatment will be given to pollutants for which a "Notice-of-Intent-Not-to-List" has been published. See the Technical Issues Document, section I.B.1.d.

[19] But cf. sections I.C. and I.D. above.

Today's notice does not address whether or under what circumstances facilities subject to NSPS, BACT or LAER may surpass applicable permit limits reflecting such requirements in order to create credits for existing-source trades.

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schedule has been modified accordingly. Sources subject to compliance schedules in administrative orders or judicial decrees must obtain prior approval from EPA or the relevant court, as appropriate, to be relieved from the schedule contained in the order or decree. Sources that are subject to SIP requirements remain responsible for meeting those requirements unless and until a bubble has become effective under Federal law. See section II.B.12 below.

7. States may extend certain compliance schedules. States may no longer grant compliance extensions under new or revised generic rules in *nonattainment areas*, whether or not such areas have demonstrations.[20] However, states may continue to grant compliance date extensions under generic rules in *attainment areas*, provided EPA has approved the extension provisions of the generic rule as being adequate to comply with the Clean Air Act, including requirements for attainment and maintenance of ambient air quality standards.

States that wish to give sources in nonattainment areas, and sources in attainment areas for which there is no applicable generic SIP provision, more time to implement bubbles by granting compliance extensions, must receive EPA approval of the extensions through case-by-case SIP revisions. Requests for such compliance date extensions, whether in attainment or nonattainment areas, may be submitted to EPA together with bubbles, as part of a single SIP revision package. EPA will separately evaluate the time extension portion of these SIP revision packages in accord with the Agency's normal criteria for review of time extensions, including consistency with the Act's requirements for expeditiousness, reasonable further progress, and attainment and maintenance. Sources should be aware that disapproval of such time extension requests may result in disapproval of the entire package (i.e., both post-trade limits and the time extension) or only part of it, depending on whether the state views these components of the proposed SIP revision as separable.

8. States may approve bubbles involving open dust sources of particulate emissions, based on modeling demonstrations. Open dust trades may be approved through individual SIP revisions based on acceptable modeling and/or monitoring demonstrations, provided sources agree to post-approval monitoring to determine if predicted air quality results have been realized and make an enforceable commitment to achieve necessary additional reductions if predicted results do not materialize.

9. Trade involving lead. Unlike other criteria pollutants, EPA does not designate nonattainment areas for lead. However, the Regional Administrator will review lead trades, as all other trades, to assure that they do not interfere with attainment and maintenance of NAAQS.

10. Trades involving ERCs from mobile source measures. ERCs from mobile source measures may be used to meet SIP requirements applicable to existing stationary sources, so long as such reductions are surplus, permanent, quantifiable, and enforceable. Reductions from certain types of mobile-source measures (e.g., mechanical conversion of existing vehicle fleets to cleaner fuels such as methanol) may satisfy these criteria more readily than those from other transport-related measures. However, due to possible difficulties in determining whether specific mobile-source reductions fully meet these criteria, all such trades must be implemented as case-by-case SIP revisions.

11. Interstate trades. Trades involving sources located in neighboring states may be approved, provided they meet all other requirements of today's notice. However, in order to avoid complex SIP accounting issues, where state trading requirements differ EPA will require that such trades meet the substantive requirements of the more stringent state. In general, EPA will deem ERCs created in one state to contribute to progress in the state where used to the extent of that use, provided that applicable ambient tests (section II.B.2 above) are met. Interstate trades must be implemented through case-by-case SIP revisions.

12. Bubbles must not impede enforcement. In general, bubbles are a form of SIP revision which should be treated neither more nor less stringently than other SIP revisions. Bubbles should not become a shield against enforcement actions for sources which have failed to take necessary steps to meet required control obligations on time.

Sources seeking trades should note that they remain subject to enforcement of existing (pre-trade) SIP limits until the bubble is approved. EPA will use the same principles and procedures for deciding whether to initiate enforcement actions in these circumstances as the Agency applies to any other source which is subject to a proposed or final SIP revision.

Under established EPA policy, regulated sources must be subject to an applicable, enforceable emission limit at all times. Accordingly, sources which have approved bubbles with emission limits effective at a future date, and which are not in compliance with their pre-trade limits prior to that effective date, may be subject to enforcement action, which could include penalties based on a failure to meet the pre-trade limits. Sources in these situations may wish to minimize the chance that capital expenditures may be required to meet pre-trade limits, either by (a) agreeing to post-trade compliance dates which are substantially similar to their pre-trade compliance dates, or (b) accelerating their compliance with post-trade limits.

In accord with the general principle that bubbles should be treated neither more nor less stringently than other SIP actions, implementation of this Policy Statement will be neutral with respect to EPA enforcement of pre-trade emission limits. This means that EPA will not specifically select for enforcement action noncompliant sources seeking to use a bubble either to come into compliance or to restructure traditional compliance. However, it also means that EPA will not withhold or defer enforcement simply because a source is seeking alternative emission limits through a bubble. In exercising its enforcement discretion, EPA will apply the same considerations to noncompliant sources which seek to comply through bubbles as to those which do not.

C. Banking Emission Reduction Credits

Only emission reductions that are surplus, permanent, quantifiable, and enforceable can qualify as ERCs and be deposited in EPA-approvable banks.[21] Such banks offer sources legal recognition that qualifying reductions meet these ERC requirements. However,

[20] Existing generic rules applicable to these areas must be revised to comport with this principle where they contain such generic extension provisions. EPA will publish Federal Register notices identifying any generic rules which require formal modification. Failure to resolve deficiencies identified in such a notice within the prescribed time period may result in EPA rescinding approval of the existing generic rule or issuing a notice of SIP deficiency. EPA expects states to ensure in the interim, so far as feasible, that compliance date extensions under existing generic rules are not granted to sources located in nonattainment areas. See section III below and section II.E.4. of the Technical Issues Document.

[21] Under today's notice emission reductions must be made enforceable *by the state* in order to qualify as ERCs and be deposited in EPA-approvable banks. However, because mere deposit of a reduction cannot result in emissions increases elsewhere, banked reductions need not be made federally enforceable until used.

the fact that an ERC has been banked does not relieve it from the need to meet all criteria of the specific regulatory program under which it is to be used.[22] Because some trades have special limitations (e.g., only reductions occurring at the same major stationary source can be used for netting), banks do not guarantee the validity or specific amount of particular banked ERCs for all potential uses or for all time. To provide maximun protection for the environment and sources and to avoid potential legal problems, state banking rules may specify the types of sources eligible to bank ERCs and any additional conditions placed on certifying, holding or using banked ERCs.

State banking rules may establish ownership rights. However, any such rights must be consistent with Clean Air Act requirements, including the requirement that SIPs provide for expenditious attainment and maintenance of ambient air quality standards and protect PSD increments and visibility. To be approvable by EPA, such banking rules must also treat banked reductions as current actual emissions "in the air" at the source of their creation, in order to protect the integrity of future air quality planning. Failure to track the ambient effects of such banked reductions (e.g. by not including them in a new or updated inventory used for SIP planning purposes, or by relying on those reductions to secure attainment redesignations) would ordinarily preclude their use as ERCs, due to double-counting. Nevertheless, states have considerable latitude in meeting these requirements, and may guarantee banked ERCs against full or partial reduction in quantity, so long as that guarantee does not undermine attainment redesignations or interfere with progress and attainment should ambient standards change or additional emission reductions be required. The Technical Issues Document, section I.C.9, outlines ways such guarantees may be made effective consistent with these requirements.

In many states, banking could be an extension of ongoing preconstruction permit activities. The state or its designee could accept and evaluate requests to certify an ERC, maintain a publicly-available ERC registry or similar instrument describing the quantity and types of banked credits, and track transfers and withdrawals of ERCs.

Because banked reductions do not increase emissions at any source, they need not be made federally enforceable until used. For administrative or other reasons states may, however, choose to make them federally enforceable upon deposit. How the state makes a reduction federally enforceable for banking will depend on the type of source at which the reduction occurs. In some states, reductions associated with other modifications at a source can be included in federally-enforceable preconstruction permits issued under rules approved pursuant to 40 CFR 51.18, 51.24 or 51.307. States with EPA-approved generic rules can use their rules' procedures to make reductions occurring at existing sources federally enforceable. See Section III below. Since these transactions involve only reductions, air quality modeling is generally not required to assure that new emission limits do not interfere with attainment and maintenance of ambient standards, protection of applicable PSD increments, or impairment of visibility in mandatory federal class I areas. Such reductions will automatically meet the generic rule's test of whether a particular limit is within EPA's preapproved array of acceptable emission limits.[23]

States without EPA-approved generic rules can adopt rules limited to banking transactions, or can use the standard SIP revision process to make reductions federally enforceable at existing sources. General state preconstruction permit or review programs that have received EPA approval may also be used for this purpose, since permits issued through such programs are federally enforceable. See 40 CFR 51.18; 51.24; 51.307.[24]

III. State Generic Trading Rules

Use of emission reduction credits under state regulations approved by EPA as generic for identified classes of trades will not require individual SIP revisions for those trades. The Technical Issues Document explains acceptable generic procedures which states may adopt to reduce the need for individual SIP revisions.

Emissions trades can be approved without case-by-case SIP revisions if evaluated by the state under EPA-approved procedures which assure that no trade which meets their terms will interfere with timely attainment and maintenance of ambient standards, protection of applicable PSD increments, or visibility provisions. State generic rules are approvable only if their procedures are sufficiently replicable in operation to meet this test. By approving the generic rule, EPA approves in advance an array of SIP-compatible emission limits, and no further case-by-case Federal review or approval is required for individual trades which meet the terms of the rule.

In order to ensure that generic rules are properly implemented, EPA intends to (a) examine and comment on, together with any other public commenter, the information which must be provided for individual trades proposed by states under a generic rule, (b) conduct reviews of individual bubbles approved under a generic rule, and (c) periodically audit the general implementation of generic rules, as part of its National Air Audit System reviews of state air programs.[25]

Any trade under a generic rule will involve emission increases at some sources and extra emission decreases at others. For trades to be approvable under a generic rule, the sum of these increases and decreases (beyond

[22] States may, however, expand opportunities for banked credits beyond those of current SIP programs (e.g., extend the "contemporaneous" period for netting), by submitting revised regulations addressing the banking and use of such credits, for approval as SIP revisions.

[23] Modeling will be necessary when a banked ERC is later evaluated for use in a trade, to the extent modeling is generally required for that particular type of emissions trade.

[24] In *primary nonattainment areas which need but lack approved demonstrations*, use for bubble purposes of banked credits produced by shutdowns or curtailments will continue to be allowed on the same terms as use of other banked credits, provided their use is subject to stringent qualitative review to assure technical, legal and programmatic consistency with SIP planning goals (e.g., avoidance of doublecounting or "shifting demand"). However, sources which seek to use banked credits from shutdowns or curtailments for bubble purposes after publication of today's notice must show that a written application was submitted to make the shutdown/curtailment state-enforceable through or concurrent with use of a formal bank or informal banking mechanism, prior to the time the shutdown/curtailment occurred. For sources which banked or sought to bank credits from shutdowns or curtailments in these nonattainment areas prior to publication of today's notice, written evidence must be provided showing either that an application to deposit the credits in a formal bank was submitted to the state prior to the time the shutdown/curtailment occurred, or that the state acknowledged, before or at the time the shutdown/curtailment occurred, both the existence of that shutdown/curtailment, and the source's intent to use the resulting credits in a future trade. For additional detail on banking and use of credits resulting from shutdowns or curtailments in these or other areas, see Technical Issues Document, Sections I.A.I.c.(3) and I.C.

[25] See, e.g., National Air Audit System Guidelines for FY 1984, Office of Air Quality Planning and Standards, EPA-450/2-83-007 (November 1983). State-approved generic trades that do not meet the terms of the relevant generic rule do not alter underlying SIP requirements, which remain fully enforceable. Generic rules found to be generally deficient in substance or implementation could ultimately result in notices of SIP deficiency or in rulemaking to rescind EPA's approval of the rule. For more detail on EPA oversight of generic rules, see Technical Issues Document, Section II.E.

applicable net baseline emissions) must be zero or less. Subject to this requirement, states may adopt generic rules which exempt from individual SIP revisions: (1) *De minimis* trades where total increases in emissions from all increasing sources (which must be balanced by equal or greater emissions decreases from other sources) are less than 25 tons per year (TPY) of particulates, 40 TPY of SO_2, 100 TPY of CO, or 0.6 TPY of lead, after applicable control requirements; (2) large classes of trades involving VOC or NO_x emissions;[26] (3) trades between certain types of SO_2 sources, between certain types of CO sources, between certain types of stationary lead sources, or between certain types of particulate sources, for which it can reasonably be assumed that "pound for pound" trades will produce ambient effects equivalent to those which approved air quality models would predict; and (4) other SO_2, CO, Pb or particulate trades which do not increase baseline emissions and for which carefully defined modeling predicts no significant increase in ambient concentrations.

States and sources should, however, be aware that because of replicability problems inherent in modeling, generic rules which rely on preapproved procedures for modeled demonstrations of ambient equivalence may be difficult to draft or implement, and many trades may not be approvable under such rules. For these reasons generic rules covering only the first three classes of trades above will often prove easiest to secure. EPA encourages states to work closely with EPA Regional Offices to formulate and adopt approvable rules or develop alternative approaches that equally assure attainment and maintenance of ambient standards and protection of PSD increments and visibility. See Section II of the Technical Issues Document, which details criteria under which such generic rules may be approved.

To the extent general state procedures for rulemaking or permit changes do not assure reasonable public notice of proposed and final limits or effective opportunity for comment on proposed trades, states must incorporate such provisions in their generic rules.

In primary nonattainment areas which need but lack approved demonstrations, new generic rules must require, and existing generic rules must, as requested by EPA, be revised to

[26] Where visibility impairment due to elevated NO_x emissions is a concern, generic trades involving NO_x must ordinarily be subject to ambient requirements similar to those applicable to generic trades involving TSP, SO_2, CO or Pb.

[27] In the interim, EPA expects states to ensure, so far as feasible, that future bubbles approved under existing generic rules are consistent with this policy as well as the terms of their EPA-approved rules. States should be aware that without this or similar precautions, continued approval of bubbles under existing generic rules containing identified deficiencies may create or accentuate plan deficiencies that may have to be corrected at a later date or compensated for by other means. See section II.E.4. of the Technical Issues Document.

[28] Such notices may also be issued for existing generic rules in attainment areas and nonattainment areas with approved demonstrations, if these generic rules are found to require procedural revision in order to make them consistent with the current Emissions Trading Policy. See Technical Issues Document, section II.E.4.

EPA recognizes the additional timing burden which may be imposed on bubble applicants in areas where new generic rules cannot be or have not been developed to meet the specific air quality benefit requirements described above, and will attempt, so far as feasible, to ameliorate that burden in implementing this policy. See, e.g., n.8 and section II–B–12. above and related Preamble discussion, at n.48 and accompanying text.

IV. Bubbles Which Require Case-By-Case SIP Revisions

States and sources must use the case-by-case SIP revision process to implement bubbles which are not covered by a generic rule. Because the case-by-case SIP revision process can take account of many more individual variations, numerous trades which cou not be accomplished through generic rules or similar means may still be approvable as case-by-case SIP revisions.

EPA will take action on generic rules and individual trades submitted as SIP revisions as quickly as circumstances permit after a state has adopted a SIP revision and submitted the action to EPA. EPA encourages "parallel processing" of such SIP revisions, with EPA and the state conducting concurrent review so that both agencies can propose and take final action at roughly the same time. EPA will also publish noncontroversial SIP revisions as immediate final actions, converting them to proposals only if requests to submit adverse comments are received within 30 days (see 46 FR 44477, September 4, 1981). In all bubble actions EPA will clearly identify (or require states to identify, as appropriate) both pre- and post-trade actual and allowable emissions for each source involved in the trade, so that the ambient effects of each bubble may be known.

V. Conclusion

This Policy Statement sets out basic principles for approving individual trades and generic trading rules. It tightens many requirements in order to better ensure SIP integrity and environmental progress, while offering ample opportunities for use of approvable, environmentally-sound trades. EPA encourages states and sources to use these principles as a framework and refer to the accompanying Technical Issues Document for further discussion and examples. EPA also encourages states to develop other approaches which satisfy these principles while meeting their specific needs.

As a policy statement, this notice does not establish conclusively how EPA will resolve issues in individual cases. EPA will accept public comment on specific SIP changes submitted under it, and will review individually each generic rule and those emissions trades submitted as SIP revisions to determine their acceptability under the Clean Air Act. Interested parties will have full opportunity to scrutinize application of these principles in specific cases, and to seek subsequent judicial review of such cases after EPA has taken final action on particular trades or generic rules.

Dated: November 18, 1986.

Lee M. Thomas,

Administrator.

Emissions, Trading: Technical Issues Document

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EMISSIONS TRADING: TECHNICAL ISSUES DOCUMENT

This Document offers more detail on technical issues for firms and pollution control agencies seeking to implement individual emissions trades or generic trading rules that meet the principles in EPA's final Emissions Trading Policy Statement. It describes both the legal requirements for emissions trades under the Clean Air Act, and a range of legal options which states [1] and sources may consider. States and firms may pursue other approaches consistent with those discussed here.

Section I of this Document explains general principles governing all emissions trading. Section II explains principles governing state generic rules. Section III discusses special considerations for emissions trades which must be implemented as case-by-case SIP revisions.

Because these sections reflect general Clean Air Act principles, states, individual sources or public commenters remain free to show that a general principle does not apply to particular circumstances or can be satisfied using another approach. States, sources and commenters have this option under current law, and nothing in the Policy Statement or this Document restricts their opportunity to make such showings.

Nothing in today's notice alters EPA new source review requirements or exempts owners or operators of stationary sources from compliance with applicable preconstruction permit regulations in accordance with 40 CFR 51.18, 51.24, 51.307, 52.21, 52.24, 52.27, and 52.28. Interested parties should, however, be aware that bubble trades are not subject to preconstruction review or regulations where these trades do not involve construction, reconstruction or modification of a source within the meaning of those terms in the regulations listed above.

[1] "States" includes any entity properly delegated authority to administer relevant parts of a State Implementation Plan (SIP) under the Clean Air Act.

I. Elements Of Emissions Trading

The basic elements of any emissions trade are the *creation* of an emission reduction credit (ERC), its *use* in a trade and its possible *storage* in a bank prior to use.

A. Creating Emission Reduction Credits

States may grant credit only for those emission reductions that are surplus, enforceable, permanent, and quantifiable. Otherwise use of ERCs might degrade air quality, threaten the viability of the area's SIP, and make more stringent control requirements necessary.

1. All Reductions Must Be Surplus

At minimum, only emission reductions not required by current regulations in the SIP, not already relied on for SIP planning purposes, and not used by the source to meet any other regulatory requirement can be considered surplus and substituted for required reductions as part of an emissions trade.

The first step in qualifying a reduction as "surplus" is to establish a level of baseline emissions. This baseline represents the level of required emissions beyond which reductions must occur for a source to be eligible for credit. Three baseline factors—emission rate, capacity utilization, and hours of operation—must be used to compute and compare pre-trade and post-trade emission levels.[2]

The baseline for each source must be established both on an annual basis and for all other averaging periods consistent with the relevant NAAQS and PSD increments. This approach is necessary to protect the ambient standards and PSD increments on a short term as well as an annual basis. The baseline will generally be determined by the attainment status of the area,[3] by the way the state developed its SIP, and by whether the area is subject to PSD requirements.

a. Use of Actual or Allowable Emissions as the Baseline: Attainment Areas and Nonattainment Areas With Approved Demonstrations of Attainment (including rural ozone nonattainment areas). In attainment areas, baseline emissions must generally be calculated using the lower of actual or allowable values[4] for all three baseline factors. However, allowable values corresponding to one or more of these factors, when higher than corresponding actual values, may be used in calculating baseline emissions, provided those values are shown to be used or reflected in an approved demonstration.[5] The burden of meeting this test rests with the state or applicant. Where the State or applicant cannot show by written evidence[6] that the demonstration assumed an allowable value for a given baseline factor, appropriate modeling would be required in order to use an allowable value for that factor in calculating baseline emissions for the source.[7] This will require a Level II modeling analysis as specified in the modeling screen described below, using actual emissions for the pre-trade case, unless the appropriate EPA Regional Office ("the Region") determines that additional technical support is necessary to protect the NAAQS, PSD increments or visibility. Additional technical support may be necessary because crediting the difference between actual and allowable values for even one of these factors may produce a post-trade increase in actual emissions sufficient to jeopardize applicable standards, increments or visibility.

Additional technical support is not necessarily limited to determining the impact of the increases from the trade. The Region may require such additional technical support, up to and including full Level III modeling, as is necessary to assure that applicable NAAQS, PSD increments and visibility requirements will be protected. It may require the determination of background concentrations to which the impacts of possible emissions increases that would otherwise fall below Level II significance values must be added. Background concentrations should be determined in a manner consistent with EPA's *Guidelines on Air Quality Models*.

In attainment areas where the PSD baseline has been triggered, the trading baseline for a source must generally be computed using actual values for all three baseline factors (i.e., only reductions below a source's actual emissions can be considered surplus). Because 40 CFR 51.24 and 52.21 specify that increses in actual emissions occurring after the PSD baseline date consume PSD increment, any trades based on allowable emissions which would potentially increase actual emissions must perform at least a Level II modeling analysis using actual emissions for the pre-trade case, and provide additional technical support if deemed necessary by the Region, to demonstrate that they protect the relevant increment ceiling, NAAQS, and visibility.

In nonattainment areas with approved demonstrations, baseline emissions for a source may be calculated using either allowable values or actual values for the three baseline factors, depending on the assumptions used in developing the area's demonstration.[8]

Some states relied on allowable values for certain sources in developing their SO_2 and TSP attainment plans. In these nonattainment areas, sources may use allowable values in calculating baseline emissions, to the extent the state used or assumed those allowable values as the basis for its demonstration. The burden of showing that an allowable value was used or reflected in an approved demonstration rests with the state or applicant which seeks to use an allowable value.[9]

Other nonattainment areas either used inventories based on actual emissions, or relied on measured (and therefore "actual") ambient air quality values, as the primary basis for determining SIP emission limits needed

[4] For the definition of "actual" and "allowable" values, and further discussion on calculation of baseline emissions, see Appendix B.

[5] This statement does not apply to netting, where "contemporaneous" actual emissions are always the baseline. See, e.g., 40 CFR 51.24(b)(3).

Bubbles in areas with demonstrations based solely on qualitative judgements (e.g., the "example region" approach or no technical support) ordinarily may not rely, without appropriate modeling, on allowable values in calculating baseline emissions. However, bubbles in areas with demonstrations based on rollbacks or dispersion modeling may use allowable values that are reflected in the demonstration.

[6] For example, the demonstration calculations themselves, accompanying materials, or affidavits from those who constructed the demonstration.

[7] In certain circumstances an allowable baseline value specified in a preconstruction permit will be deemed equivalent to one used or reflected in an approved demonstration. For example, a source in an *attainment* area where a PSD baseline has been triggered may use allowable values consistent with its preconstruction permit, if that source's emissions are not reflected in the PSD ambient baseline concentration. (However, if modeling using allowable emissions predicts a PSD increment violation, then additional analyses must be done to assure that the PSD increment is protected.) A source in a *nonattainment* area may use allowable values consistent with its preconstruction permit to calculate its baseline, provided that permit post-dates the nonattainment designation, SIP call, design year, or baeline inventory year, whichever is applicable.

[8] This statement does not apply to netting, where "contemporaneous" actual emissions are always the baseline. See, e.g., 40 CFR 51.18(j)(1)(vi). See also Appendix B for detailed discussion of "actual" and "allowable" emissions.

[9] See n. 6 and 7 above.

to demonstrate attainment. In some areas, SIP demonstrations were based merely on qualitative judgments (e.g., "example region" approaches). Baseline emissions for sources in all these other areas must generally be calculated using the lower of actual or allowable values for each baseline factor. However, states may approve, on a case-by-case basis, use of allowable values in calculating baseline emissions, where they explicitly demonstrate that such use comports with reasonable further progress and will neither create a new ambient violation nor delay the planned removal of an existing violation. Such demonstrations require full Level III modeling and must be submitted to EPA as case-by-case SIP revisions.

EPA deems designated *Rural Ozone Nonattainment Areas* to possess acceptable demonstrations of attainment provided they have an approved new source review rule and require RACT controls for all major VOC sources for which EPA has issued Control Technique Guidance (CTG) documents. (See, e.g., 43 FR 21673 (May 19, 1978)). Because these areas' nonattainment is generally caused by emissions from sources in a nearby urban area, control of emissions from that area is expected to bring the rural area into attainment. Put differently, EPA does not require rural areas to cure problems due to transport from pollution-generating areas which rural areas cannot control. However, EPA believes that further clarifications are required for bubbles in these areas.

Sources involved in such bubbles must use RACT emission limits in calculating baseline emissions, if subject to Group I or II CTGs under the EPA approved SIP for these areas. Sources subject to other SIP emission limits must use those limits in calculating baseline emissions. Other baseline factors must also be consistent with the applicable SIP requirements, and will generally be actual historical values. Where a source is not regulated by the EPA-approved SIP its baseline will be actual emissions in the year EPA approved the Part D plan for the affected rural area. In those approvals, EPA presumed that controls for sources in the upwind urban areas, as well as RACT on GTC sources in the rural area, would bring about attainment in the rural area, and that non-CTG sources in the area, unless regulated by the SIP, could continue to emit at actual, non-RACT levels without interfering with attainment in those areas. See also 43 FR 21673 (May 19, 1978).

b. Special Progress Requirements for Bubbles In Primary Nonattainment Areas Which Need But Lack Approved Demonstrations of Attainment. EPA will approve bubbles which are consistent with the attainment needs of these areas, which produce a net air quality benefit, and which therefore secure interim progress towards attainment.[10]

(1) *Objective Tests For All Applications.* Bubble applications in primary nonattainment areas which require but lack approved demonstrations of attainment will be deemed to produce a net air quality benefit and will be processed for approval if they:

(a) Use lowest-of-actual-SIP-allowable or RACT-allowable emissions baselines. Such baselines are calculated using either:

(i) The actual emission rate, the SIP or other federally enforceable emission limit, or the applicable RACT emission limit,[11] whichever is lower, to compute the baseline for each source involved in the trade. This baseline factor shall be determined as of the date of the source's application to bank or trade, whichever is earlier.

(ii) The lower of actual or allowable capacity utilization and hours of operation to compute the baseline for each source involved in the trade. Actual values shall generally be based on the two years of operation preceding the application to bank or trade, unless another two year period is shown to be more representative of actual operations. Sources which shut down prior to the application to bank or trade have zero emissions, and therefore no credit is available.

For sources which banked or sought to bank credit in these nonattainment areas prior to publication of today's notice, the "date of application to bank" is the date of written application to the states to bank credit through a formal bank or informal banking mechanism for use in future trades. For sources which seek to bank credit in these areas following publication of today's notice, the date of application to bank will be the date of written application to the state to *make a reduction state-enforceable* through or concurrent with use of a formal bank or informal banking mechanism.

(b) Using baseline emissions defined above, meet applicable *de minimis*, Level I, Level II or Level III modeling tests for ambient equivalence, as appropriate.

(c) Produce a substantial net reduction in actual emissions (i.e., a reduction of at least 20% in the emissions remaining after application of the baselines specified above).

(d) Are accompanied by the assurances of consistency with ambient progress and air quality planning goals specified in section I.A.1.b.(3) below.

(2) *Where These Special Progress Requirements Will Apply.* The following primary nonattainment areas need but lack approved demonstrations, and bubbles within them are therefore subject to the special progress requirements in section I.A.1.b.(1) above:

(a) Areas that are designated primary non-attainment areas under section 107 for the pollutant involved in the trade and which failed to submit a 1979 Part D attainment demonstration or which submitted one that has not yet received full EPA approval. This includes primary total suspended particulate (TSP) nonattainment areas which submitted a SIP that did not include an actual demonstration of attainment but still received EPA approval (i.e., a "RACT plus studies" SIP).

(b) Extension nonattainment areas which failed to submit a 1982 SIP demonstration, or which submitted one that has not yet received EPA approval. Also included are those ozone nonattainment areas that are unable to demonstrate attainment by 1987, unless a demonstration of attainment for the area is subsequently approved by EPA.

(c) Areas that have received either: (1) A section 110(a)(2)(H) notice of deficiency based on failure to attain or maintain the National Ambient Air Quality Standards (NAAQS), in the form of a SIP call or a new section 107 or 171(2) nonattainment designation: or (2) a notice of failure to implement an approved SIP.

(d) Areas which received notice from EPA that they have failed to meet conditions in their EPA-approved SIPs, including commitments to adopt particular regulations by specified dates. The one exception would occur where the only portion of the SIP (including the attainment demonstration) lacking full approval is the inspection/maintenance provision for mobile sources. In these circumstances, stationary-source bubbles will be treated as if the area had a fully approved SIP.

(e) Any area that does not have an EPA-approved or EPA-promulgated plan for lead.

[10] While not all of today's new requirements for bubbles in these areas are strictly "baseline" matters, all basic requirements for these bubbles are set out here for simplicity. New requirements also apply to generic bubble rules in these areas. See Section II.D below.

[11] Where an emission limit for a source involved in the trade has not previously been approved by EPA as RACT, a baseline reflecting a negotiated RACT emission rate must be agreed upon by the source, state and EPA for the source in question.

(3) *State Assurances.* EPA will not approve a bubble in primary nonattainment areas needing but lacking approved demonstrations unless the state provides assurances that the proposed trade will be consistent with its efforts to attain the ambient standard. The state must make the following representations to the EPA Regional Office in or with the letter formally submitting the bubble as a revision to the SIP:

(a) The resulting emission limits are consistent with EPA requirements for ambient air quality progress, as specified in Section I.A.l.b.(1) above.

(b) The bubble emission limits will be included in any new SIP and associated control strategy demonstration.

(c) The bubble will not constrain the state or local agency's ability to obtain any additional emission reductions needed to expeditiously attain and maintain ambient air quality standards.

(d) The state or local agency is making reasonable efforts to develop a complete approvable SIP and intends to adhere to the schedule for such development (including dates for completion of emissions inventory and subsequent increments of progress) stated in or with the letter formally submitting the bubble or previous such letters.

(e) The baseline used to calculate the bubble emission limits is consistent with the baseline requirements in section I.A.l.b.(1) above.

These state assurances must be made in writing by the appropriate state or local authority (e.g., State Air Director, Air Pollution Control Board, or Legislative Committee). EPA will not second-guess such state representations, provided: (1) They are a substantial test applied by the state to each bubble, and (2) the state has explained how the proposed bubble is consistent with the area's projected attainment strategy. Nor will EPA examine, or expect states to examine in making such representations, any specific source's subjective motivation in making claimed reductions.

(4) *Treatment of Pending Bubble Applications.* "Pending bubbles" means those which are currently pending at EPA Regions or Headquarters, as well as any bubble applications which were formally submitted to EPA Regions under the 1982 policy but returned without action because final bubble criteria had not yet been issued. In primary nonattainment areas needing but lacking demonstrations, these bubbles should contribute to progress towards attainment. "Progress towards attainment" means some extra reduction beyond equivalence, with the lowest-of-actual-SIP-allowable-or-RACT-allowable emissions baseline applied as of the time applicants originally sought credit. In other areas these bubbles must show that applicable standards, increments, and visibility requirements will not be jeopardized. Pending bubbles which meet these tests and all other applicable requirements of the 1982 policy will be processed for approval.

Pending bubbles may undergo limited modification by the states or sources which submitted them in order to meet the new requirements outlined above (e.g., it may be necessary to recalculate the applicable baseline emissions of certain bubbles in nonattainment areas needing but lacking demonstrations and to reconfigure those bubbles in response to the reduced credit which may be allowed under the new more stringent requirements). However, pending bubbles which prior to final EPA approval are changed to the extent that they no longer reasonably resemble the original proposal qualifying for pending bubble status (e.g., those which are substantially expanded in scope or changed to involve primarily different sources of emission reduction credit) will be considered new bubbles subject to all of the requirements of today's notice.

Bubble applications which were submitted to EPA Regions by states, but which were withdrawn (or rejected) as inadequate under the 1982 policy, are not "pending." These bubbles, if reformulated and resubmitted, must meet all requirements of today's notice applicable to new bubble applications.

(c.) *No Double-Counting of Reductions.* At minimum, to be considered surplus an emission reduction cannot already have been claimed as part of a demonstration or updated emission inventory by any state air quality plan or have been used by the source to meet any other regulatory requirement. Double-counting of reductions—granting credit for the same emission reduction, e.g., once to the state as part of its nonattainment SIP demonstration or PSD baseline, and a second time to a source for use in an emissions trade, must be addressed in the following situations.

(1) *Crediting Pre-Existing Emission Reductions.* In *nonattainment areas* credit generally cannot be granted for emission reductions made before monitoring data is or was collected for use in current SIP planning. Because monitored ambient levels *already* reflect these emission decreases, such decreases may have been assumed in calculating the further reductions needed to attain ambient standards. States must clearly show that the existence of these reductions has been

[12] For baselines and base year dates in rural ozone nonattainment areas, see section I.A.l.a. above.

[13] In order to help avoid such results, states may wish to make sources responsible to report banked emission reductions when responding to the states' inventory reporting requirements.

[14] In all nonattainment areas, emission reductions achieved by shutting down or permanently curtailing an existing source prior to application for a new source permit cannot generally be used as *offsets.* See 40 CFR 51.18(j)(3)(ii)(c). EPA proposed on August 25, 1983 to remove this restriction. See 48 FR 38742, 38751. However, it remains in effect unless and until EPA takes final action on that proposal.

reduction credits must be considered to be "in the air" for all planning purposes, if the baseline date is triggered before banked credits are actually used, such banked credits will be considered as part of the baseline and will not consume increment when used in an emissions trade.

In attainment areas where the PSD baseline has not been triggered as of the date EPA or the permitting authority takes relevant final action on the trading transaction, reductions below current SIP or permit limits generally may be used without special restrictions in bubble or banking transactions, provided they are otherwise creditable and there is assurance that NAAOS will not be violated due to any potential increase in actual emissions.[15]

(2) *Crediting Reductions From Shutdowns.* Shutdowns are generally treated for purposes of emissions trading like any other type of emissions reduction.[16] For example, the same limitations on pre-existing reductions (section I.A.1.c.(1), above) apply to shutdowns where they apply to any other type of emissions reduction. However, under current federal New Source Review requirements for major sources, shutdowns that occur prior to application for a new source permit can be used as offsets only for equipment replacing on-site productive capacity which was shut down.[17]

Shutdowns are of general concern with respect to double-counting where a state may have relied directly or indirectly on shutdowns in a SIP demonstration of attainment. (Where a primary nonattainment area needs but lacks an approved demonstration of attainment, the progress requirements of subsection I.A.1.b. above apply to bubbles involving shutdowns as well as to bubbles involving other types of emission reductions. These requirements generally bar use of reductions from shutdowns which occurred before application to bank or trade.)

In general, a state may credit reductions from shutdowns if the SIP has not already assumed credit for these reductions in its attainment strategy. So long as reductions from shutdowns have not already been counted in developing an area's attainment strategy, they are a potential source of surplus reductions.

Some SIPs assumed a set quantity of reductions from the overall difference in emissions due to new plant openings and existing plant shutdowns. These SIPs incorporated into their attainment strategy a net "turnover" reduction in emissions because new sources are generally cleaner than those that shut down. Double-counting would occur if a specific source received credit for reductions from such a shutdown, since that reduction was already assumed in the SIP's demonstration of attainment.

These states have at least two options for granting sources credit for shutdowns without this kind of double-counting. First, they may reexamine any "turnover" reductions relied on in their SIP and decide not to take credit for these reductions. This approach would require EPA approval of a revised demonstration of attainment or a SIP revision showing consistency with the existing demonstration. Such an action can be processed by EPA concurrently with a bubble or generic rule. Alternatively, these states may allow credit only after the total quantity of shutdown reductions relied on in the SIP has occurred.

In all cases where net turnover reductions have been quantified and relied on as part of attainment demonstrations, states which seek to grant shutdown credit for use in trading must be prepared to show clearly and unequivocally on the basis of SIP documents or tracking that the credit has not been double-counted or otherwise relied on for SIP planning purposes.

(3) *Use of Banked Credits From Shutdowns or Other Actions for Bubble Purposes.*[18] In primary nonattainment areas which need but lack approved demonstrations, ERCs intended for bubble purposes may generally be banked and used with the same lowest-of-actual-SIP-allowable-or-RACT-allowable baseline used for other bubble transactions.[19] This baseline should be applied as of the time banked credit is or was initially sought, with the 20% reduction applied to both sources in the trade if these credits are later used for bubbles. The lowest-of-actual-SIP-allowable-or-RACT-allowable baseline plus the 20% discount will also apply to the source using that credit in a bubble, as of the time of such subsequent bubble application.

Banked credits produced by *shutdowns and curtailments* may be used for bubbles in these areas on the same terms as use of other banked credits, provided their use is subject to stringent qualitative review to assure technical, legal, and programmatic consistency with SIP planning goals (e.g., avoidance of double-counting and "shifting demand"). This review will not examine any source's motivation in shutting down a facility or curtailing production. However, the source must show that a written application was submitted to make the shutdown/curtailment state-enforceable through or concurrent with use of a formal bank or informal banking mechanism, prior to the time the shutdown/curtailment occurred. Submittal of such an application to make proposed reductions from a shutdown or curtailment state-enforceable will constitute the relevant definition of "application to bank" for timing purposes related to the evaluation of bubble credits in these nonattainment areas (see section I.A.1.b(1) above).[20] The shutdown/curtailment must be made *federally* enforcement when it is used in a bubble.

Use for bubble purposes of *nonbanked* credits resulting from current shutdowns or curtailments will be allowed in these areas if the lowest-of-actual-SIP-allowable-or-RACT-allowable baseline plus the 20% additional reduction are applied to determine the amount of credit.

No special baseline or additional reduction requirements will apply to these credits in other areas.

d. Multiple Use of ERCs. Once surplus reductions are credited, states must prohibit their multiple use. The same pound of reduction must not be simultaneously banked by two different entities or used to satisfy two different regulatory requirements at the same time. To prevent these results, states must adopt an ERC registry or equivalent means of accounting for the creation, banking, transfer, or use of ERCs. See Section I.C.6 below. States must also ensure that past reductions used in bubble, netting or offset transactions are not later credited in newly-established banks.

[15] However, reductions at sources other than major stationary sources on which construction commenced before January 1, 1975 may not be used to offset increases at such pre-1975 major sources.

For use of banked shutdown credits for bubbles in primary nonattainment areas needing but lacking approved demonstrations, see section I.A.1.c(3) below.

[17] See n. 14 above.

[18] ERCs used for *netting* and *offset* purposes (including those derived from banks) must comply with relevant NSR and PSD requirements.

[19] For further discussion related to the use of banked credits in these nonattainment areas, see section I.C.9. below.

[20] For sources which banked or sought to bank credits from shutdowns or curtailments in these nonattainment areas *prior to publication of today's notice*, written evidence must be provided showing either that an application to deposit the credits in a formal bank was submitted to the state prior to the time the shutdown/curtailment occurred, or that the state acknowledged, before or at the time the shutdown/curtailment occurred, both the existence of that shutdown/curtailment, and the source's intent to use the resulting credits in a future trade.

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e. Reductions from Uninventoried Sources. Sources not included in an area's SIP emission inventory may apply for emission reduction credit. Such applications may enhance state air quality planning capabilities. Where such sources are already subject to SIP emission limits, those emission limits must be used as the basis for determining emission reduction credit, unless a more stringent baseline would normally be required (see sections I.A.1.a. and I.A.1.b. above).[21]

In *attainment areas* states may grant bubble credit to sources regardless of whether they have been included in an inventory, based on use of actual values for each of the three baseline factors, so long as those sources are not subject to lower allowable values for those factors. Allowable values, when higher than actual values, may alternatively be used in calculating the baseline, provided sources show that any resulting potential increase in actual emissions does not jeopardize applicable ambient standards, PSD increments, or visibility. (See 40 CFR 51.24 and 52.21 for specific requirements concerning PSD increments and visibility.)

In *nonattainment areas with approved demonstrations of attainment*, whether sources not on the inventory can create bubble credit will turn on how the approved demonstration of attainment was designed. Some states first monitored ambient values to determine required reductions for the SIP, then required a proportionate reduction in emissions from certain general source categories (i.e., a "rollback") in order to attain. States may grant credit for reductions from uninventoried sources in these areas in at least two ways.

(1) They could require the average of percentage reductions imposed on all inventoried sources, and grant credit only for reductions in excess of that amount. In this case, baseline emissions should be based on the percentage reduction in actual emissions for the year in which the baseline data for the rollback was gathered. Where such sources are already subject to lower SIP emisssion limits, those limits must be used to determine credit.

(2) They could require the source to use a RACT emission rate and the lower of actual or allowable capacity utilization and hours of operation to calculate the baseline, and grant credit only for reductions below that baseline. This RACT baseline would have to result in a reduction at least as great as the percentage reduction assumed in the rollback. As discussed above, where sources are already subject to lower SIP emission limits, those limits must be used as the basis for determining credit.

Other areas developed SIP demonstrations based on dispersion models rather than area-wide proportionate reductions. To the extent these SIPs demonstrated ambient attainment through reductions required from specific inventoried sources, incorporated emissions from uninventoried sources in the background or area source totals, and projected attainment by modeling the effects of those reductions, reductions from sources not on the inventory can be credited using the lower of actual or allowable values for each of the baseline factors.

In *primary nonattainment areas which need but lack an approved demonstration of attainment*, the progress requirements of Section I.A.1.b. above apply to bubbles which seek to use credit from uninventoried sources. These include a lowest-of-actual-SIP-allowable-or-RACT-allowable emissions baseline. Where a RACT emission limit has not already been adopted for an uninventoried source, such a limit must be agreed upon between the source, the state and EPA before the baseline can be determined.

States which grant credit from uninventoried sources not subject to permits, offset requirements, or enforceable production constraints should address the possibility that reductions from one such source may be followed by equal or greater increases from similar nearby sources due to shifting demand. These states must clearly demonstrate that ERCs from the uninventoried source are surplus and permanent. Interested parties should be aware that some uninventoried sources may not readily meet these tests. For example, reductions resulting from shutdown of a dry cleaner will generally not be creditable, unless the state subjects such sources to offset requirements or other measures addressing this problem. However, reductions due to improved control at such a dry cleaner would generally be creditable, since shifting demand is not implicated.

Baselines for Open Dust Trades. Fugitive dust regulations generally consist of generic work practices and operating procedures. The specifics of a fugitive dust program are generally contained in an operating permit or fugitive dust program. It is generally not possible to identify the appropriate emissions baseline from a general state open dust regulation. Therefore, for any open dust trade a negotiated RACT baseline must generally be agreed upon between the source, state and USEPA for the open dust source in question.

2. Alternative Emission Limits Must Be Enforceable

Each bubble, netting, offset or banking transaction must be approved by the state and must be federally enforceable at the time an ERC is used. Reviewing authorities may be able to use existing procedures (including preconstruction permits issued by states pursuant to 40 CFR 51.18, 51.24, 51.307 or 52.21) or EPA-approved generic rules to make reductions federally enforceable. The former possibility exists because permits issued under a federally-approved new source review program are federally enforceable. However, many preconstruction permit programs have been federally approved strictly for sources subject to NSR, and therefore may not be capable of use for transactions that do not trigger NSR requirements, or that involve sources not already subject to preconstruction permits.

With respect to the latter possibility, any enforceable compliance instrument imposing emission limits within the scope of an EPA-approved generic rule is deemed federally enforceable as part of the SIP.

Emission limits established by a trade must be incorporated in a compliance instrument which is legally binding and practicably enforceable by EPA.

Trades involving individual SIP revisions automatically satisfy this requirement. For trades under generic rules a compliance instrument culd take the form of an agreement between the source and state, a preconstruction permit (if one is applicable), a consent decree, a state operating permit, or any other compliance instrument judicially enforceable by the state. To assure state enforceability, the generic rule should state that sources subject to these instruments are required to meet the emission limits contained therein. Such instruments would then automatically become federally enforceable via an EPA-approved generic rule, provided they are issued as, or part of, the compliance instrument specifically required by the generic rule.

Compliance instruments must ensure that enforcement personnel do not have

[21] Where a given source was not subject to mandatory RACT regulation due to the fact that it was not included in the inventory (e.g., where no RACT regulation for a source category was adopted because the state, unaware of the source, issued a declaration that no source existed in that source category, or where an uninventoried, non-CTG source of greater than 100 TPY emissions is located in an ozone extension area), a baseline reflecting a negotiated RACT emission rate must be agreed upon between the source, the state and EPA for the uninventoried source in question.

to test simultaneously every emission source involved in a trade. This generally requires source-specific emission limits. However, states may use pre-specified combinations of source-specific emission limits which are enforceable. States may also use an overall limit that applies to a group of emission sources which can be evaluated simultaneously, where there is a reliable and enforceable method of determining compliance (e.g., through production records, input factors, or other indirect means, or through use of a continuous emissions monitor.) See, e.g., 45 FR 80324, December 8, 1980.

The compliance instrument should also specify applicable restrictions on hours of operation, production rates or input rates; enforceable test methods for determining compliance; and necessary recordkeeping or reporting requirements. To be enforceable, these limits must state the minimum time period over which they will be averaged (e.g., lbs/hour, lbs/MBtu averaged over 24 hours, production rate/day).[22] Unless such enforceable restrictions are or have been placed on capacity utilization and hours of operation, or on overall emissions, maximum values for capacity utilization and hours of operation must generally be used in calculating post-trade emission limits and in ambient modeling of the post-trade case.

3. All Reductions Must Be Permanent

All emission increases in a trade must be compensated by emission reductions that are permanent (i.e., assured for the life of the corresponding increase, whether unlimited or limitied in duration).[23] This requirement may generally be met by enforceable permit limitations confirming the amount and duration of the decrease. If reductions with a limited life are used, the life of the trade must be limited accordingly, so that the trade will automatically terminate with expiration of those reductions. The date of termination may be specified in the notice of approval. Alternatively, source(s) may agree to provide formal written notification to EPA and the state before such reductions may be discontinued and the trade terminated.

Permanence may present special but resolvable "shifting demand" problems for reductions from small sources not subject to permits, offset requirements, or enforceable production constraints. States which grant credit from these source categories must address the possibility that reductions from one source may result in equal or greater increases from similar nearby sources.[24]

In order to use, in a bubble trade, emission reduction credits derived from reductions in operations beyond those consistent with the baseline (e.g., a reduction from 3 to 2 workshifts), a source must have its preconstruction permit or other federally enforceable compliance instrument altered to reflect the curtailment in production records reflecting such curtailment (see section I.A.2 above).[25] Future increases in production beyond the permit amount may trigger new source review or require approval of a new emissions trading application which includes compensating emission reductions. As with other types of noncompliance, any source which exceeds permitted production limits would be subject to potential noncompliance penalties.

4. All Reductions Must be Quantifiable

Before an emission reduction can be credited it must be quantified. This generally means the state must establish a reliable basis for calculating the amount and rate of the reduction and describing its characteristics.

a. Calculating the Reduction. To quantify the amount of emission reductions eligible as ERCs, emissions must be calculated both before and after the reduction (i.e., assuming the post-reduction limits). Although many different methods of calculation are available (e.g., emission factors, stack tests, monitored values, production or process inputs), the same method and averaging time should generally be used to quantify emissions both before and after the reduction.[26]

b. Describing the Reduction. If an ERC will be used at the time of creation, only characteristics necessary to evaluate that proposed use need be described. Where the ERC will be banked and its eventual use is not yet known, a more detailed description should be provided in order to facilitate its later evaluation for a particular use.

B. Using Emission Reduction Credits

This section explains the substantive and procedural principles applicable to use of ERCs, primarily for existing-source bubbles. Many of these principles also apply to use of ERCs in netting or offset transactions. However, those transactions are governed by EPA's New Source Review regulations (40 CFR Parts 51 and 52) or state rules reflecting them.

1. *Substantive Principles for Using ERCs.*

a. Emissions Trades Must Involve the Same Pollutant. The Clean Air Act requires states to develop separate plans to attain and maintain the national ambient air quality standard for each criteria pollutant. Thus, all individual bubble, netting or offset transactions must involve the same pollutant. Only reductions of particulates can substitute for increases of particulates, reductions of SO_2 for increases in SO_2, etc.

b. All Uses of ERCs Must Satisfy Ambient Tests. Because the Clean Air Act requires that all areas throughout the country attain and maintain ambient standards, protect applicable PSD increments, and protect visibility in mandatory Federal Class I (PSD) areas, bubbles must generally be equivalent in ambient effects to the baseline emission levels which they replace.[27] In *nonattainment areas*, use of ERCs cannot create a new violation of an ambient standard or delay the planned removal of an existing violation. In *attainment* areas, use of ERCs cannot violate an increment or ambient standard. Use of ERCs in either type or area cannot adversely affect visibility in any mandatory Federal Class I area.

The ambient effect of a trade generally depends on the dispersion characteristics of the pollutant involved.

VOC or NO_x Trades. Trades involving VOC or NO_x need consider only emissions. Since the ambient impact of these pollutants is areawide rather than localized, one pound of increased emissions will be balanced in ambient

[22] Many state permits or permit procedures may need revisions to assure that they provide adequate compliance information. However, such revisions need only occur on a case-by-case basis as individual trades are approved.

[23] Permits or other compliance instruments for limited-duration trades must clearly state such limits.

[24] States can address such potentially "shifting demand" among such sources as dry cleaners, paint shops and gas stations by, for example (1) prohibiting creation of ERCs due to shutdown or curtailment of such small sources; (2) limiting ERCs from small sources to categories determined not to be subject to shifting demand; or (3) requiring offsets for increases in emissions from such small sources. Cf. section I.A.1.e. above.

[25] Under EPA's NSR regulations, prior curtailments are subject to the same restrictions for offset purposes as prior shutdowns. See n. 14 above.

[26] In general, states may not approve VOC trades in ozone nonattainment areas where such trades would incorporate averaging times longer than one day. However, where VOC sources show that daily VOC emissions cannot be determined or application of RACT is not technically or economically feasible on a daily basis, longer averaging times may be permitted. See Appendix D.

[27] In primary nonattainment areas needing but lacking an approved demonstration of attainment, bubbles must achieve a net air quality benefit. See Section I.A.1.b. above.

effect by one pound of decreased emissions within the same broad geographic area, and the precise location of those increases and decreases ordinarily does not matter. For VOC and NO_x such "pound-for-pound" trades may therefore be treated as equal in ambient effect where all sources involved in the trade are located in the same control strategy demonstration area or the state otherwise shows such source to be sufficiently close that a "pound-for-pound" trade can be justified.[28]

Particulate Matter, SO_2, CO or Lead Trades. Ambient considerations are critical for trades involving emissions of sulfur dioxide, particulates, carbon monoxide, or lead, whose air quality impacts may vary with where the emission increases and decreases occur. For example, one hundred pounds of ERCs for such a pollutant created at one source may balance the ambient impact of a 100-pound increase at a source nearby, but may only balance the effect of an 80-pound increase at a source further away. In addition to distance between sources, plume parameters, pollutant characteristics, meteorology, and topography will also affect the ambient impact of such trades.[29]

This Document authorizes the use of four alternative methods of determining ambient equivalence, with the degree of required modeling linked to the likely ambient impact of the proposed trade. The following sections describe use of these alternatives to evaluate for approval many bubble or offset trades without full scale ambient dispersion modeling.[30] Use of these alternatives under generic rules is discussed in section II below.

(1) *De Minimis.* In general no modeling is needed to determine the ambient equivalence of trades in which applicable net baseline emissions do not increase [31] and in which the sum of the emissions increases, looking only at the increasing sources, totals less than 25 tons per year (TPY) for particulate matter, 40 TPY for sulfur dioxide, 100 TPY for carbon monoxide, 40 TPY for NO_x (where visibility impacts are of concern), or 0.6 TPY for lead, after applicable control requirements. Such trades will have at most a *de minimis* impacts on local air quality because no net increase in emissions will be produced and the amount of emissions being shifted is less than designated significance levels in associated EPA regulations (see, e.g., 40 CFR 51.18(j)(1)(x) and 51.24(b)(23)(i)).[32]

(2) *Level I.* In general no modeling to determine ambient equivalence is needed if:

(a) The trade does not result in an increase in applicable net baseline emissions; [33]

(b) The relevant sources are located in the same immediate vicinity (within 250 meters of each other);

(c) No increase in baseline emissions occurs at the source with the lower effective plume height as determined under EPA's *Guidelines on Air Quality Modeling:*

(d) No complex terrain [34] is within the area of significant impact of the trade [35] or 50 kilometers, whichever is less; [36]

(e) Stacks with increasing baseline emissions are sufficiently tall to avoid possible downwash situations, as determined by the formula described at 50 FR 27892 (July 8, 1985) (to be codified at 40 CFR Part 51); and

(f) The trade does not involve open dust sources.

For such Level I trades it can reasonably be assumed that "pound-for-pound" trades will produce ambient effects equivalent to those which EPA-approved air quality models would predict. Therefore modeling to determine ambient equivalence is not required.

Trades between fugitive process sources and stack sources (i.e., process-for-process or process-for-stack) can acceptably be evaluated and approved under Level I as long as the maximum distance between any emitting sources in the trade is less than 250 meters and all other Level I criteria are met.

(3) *Level II.* Bubble trades which are neither *de minimis* nor Level I may nevertheless be evaluated for approval based on modeling to determine ambient equivalence limited solely to the impacts of the specific emission sources involved in the trade, if there is no increase in applicable net baseline emissions,[37] if the potential change in emissions before and after the trade will not cause a significant increase in pollutant concentrations at any receptor for any averaging time specified in an applicable ambient air quality

[28] The discussion in this paragraph does not apply to NO_x trades involving visibility impacts of elevated plumes.

[29] The ambient equivalence considerations elaborated in this and following paragraphs also apply to NO_x trades involving visibility impacts of elevated plumes. See n. 28 above.

[30] Modeling is generally not required for new source netting, whose purpose is to avoid expending resources where adverse emission or ambient impacts from changes at a source are extremely unlikely. See, e.g., 45 FR 52677–78 (August 7, 1980).

[31] Interested parties should, however, be aware that in some circumstances modeling may be required to justify using certain emissions baselines, prior to the trade. Where a bubble in a *nonattainment* area seeks to employ allowable values greater than corresponding actual values in the calculation of baseline emissions, and where such allowable values are not shown to be used or reflected in an approved demonstration, a full Level III modeling analysis will be required. Where a bubble in an *attainment* area seeks to employ allowable values greater than corresponding actual values in the calculation of baseline emissions, and where such allowable values are not shown to be used or reflected in an approved demonstration, a Level II modeling analysis (see below) using actual emissions for the pre-bubble case will be required unless, for bubbles processed as case-by-case-SIP revisions, the Region determines that additional technical support is necessary to protect applicable standards or increments. Where allowable values are used to calculate baseline emissions for such a case-by-case-SIP revision bubble in an attainment area where the PSD baseline has been triggered, the Region will require the technical support necessary to protect PSD increments.

Where allowable values higher than actual values are not shown to be used or reflected in an approved demonstration, states that wish to authorize their use in attainment areas *under generic bubble rules* must either state, or develop replicable procedures addressing, background values and how they will be evaluated in conjunction with the actual changes in ambient concentration predicted by the Level II analysis. These steps must be sufficient to protect standards and increments and must be approved by EPA as part of a generic rule.

For further discussion regarding calculation of baseline emissions and related modeling requirements, see Section I.A.1. above and Appendix B below.

[32] This paragraph should not be construed to imply that *new* sources and modifications need not meet all applicable requirements, including those specified under 40 CFR 51.18 or parallel EPA-approved state rules.

[33] See n. 31 above.

[34] Complex terrain is broadly defined by EPA as terrain greater in height than the physical stack height of a source. For bubble purposes, this definition is applicable only to sources with increasing baseline emissions.

[35] For guidance on determining "area of significant impact," see Appendix E below. The graph in Appendix E, or EPA-approved alternative approaches, may be incorporated in generic rules to make this aspect of Level I analysis replicable and operational. See Section II below.

[36] Generally, trades involving complex terrain as defined above may not be exempt from modeling under a Level I analysis. However, EPA will consider on a case-by-case basis additional criteria for determining whether a particular trade involving complex terrain, but otherwise meeting the requirements specified above, does not present a problem of potential plume impaction and may be approved under a Level I analysis. These additional criteria would include such factors as source height and emission rates, distance between stacks and elevated features, rate of topographical rise, and other considerations which may be appropriate for the particular geographic area. States are encouraged to work with EPA to determine where and how such additional criteria can be developed and applied to individual trades.

[37] See n. 31 above.

standard,[38] and if such an analysis does not predict any increase in ambient concentrations in a mandatory Federal Class I area.[39] The change in concentration from the before-trade case to the after-trade case must in general be modeled using refined models such as MPTER and ISC for each appropriate averaging time for the relevant national ambient air quality standards for each receptor, using the most recent full year of meteorological data.[40]

(4) *Level III.* Full dispersion modeling considering all sources affecting the trade's area of impact is required to determine ambient equivalence if applicable net baseline emissions will increase as a result of the trade,[41] or if the trade cannot meet criteria for approval under *de minimis*, Level I or Level II.

However, a geographically limited Level III analysis may be used in some cases where a Level II analysis predicts one or more exceedances of the Level II significance values. While this analysis will be limited in terms of geographic scope, it must otherwise meet the modeling requirements for a full Level III analysis, including consideration of all sources affecting the limited geographical area. In many situations this approach may permit the receptor area to be smaller than the trade's entire area of impact. Because of the unique nature of each situation, the appropriate limited geographic area must be determined in accord with EPA guidelines on modeling, and through case-by-case evaluation.

Bubble trades are approvable under either type of Level III analysis if they do not cause a new violation of NAAQS or PSD increments, significantly contribute to or delay the planned removal of an existing violation, or adversely affect visibility in mandatory Federal Class I areas.[42]

This three-tiered modeling approach is both reasonable and conservative. It will assure that the ambient impact of trades is at least equivalent in effect to original SIP emission limits, while conserving government resources and shortening approval times for many individual trades.

c. Bubbles Should Not Increase Applicable Net Baseline Emissions. Ordinarily, bubbles may not result in an increase in applicable net baseline emissions. Such a bubble would require a case-by-case SIP revision, and may only be approved based upon a combined Level III and Level II modeling analysis (i.e., an analysis sufficient to show that all applicable requirements of a full Level III analysis (as described above) are met, and that the bubble would not result in any exceedance of significance values specified for a Level II analysis at any receptor for any averaging time specified in an applicable ambient air quality standard.[43]

Where such a bubble is proposed in a *nonattainment area*, the state must demonstrate that the trade is consistent with the progress demonstration under an approved demonstration of attainment, revise its EPA-approved progress demonstration as part of the proposed SIP revision, or otherwise show (e.g., by modeling and any necessary compensating emission reductions) that the proposed trade comports with the EPA-approved emissions and ambient progress demonstration.

d. Bubbles Should Not Increase Emissions of Hazardous or Toxic Air Pollutants. Under the Clean Air Act all sources must meet applicable section 112 (NESHAPs) requirements for control of hazardous air pollutants. Sources may neither use a bubble to meet these requirements, nor increase emissions beyond the levels they prescribe. Where a source wishes to generate or use emission reduction credit for a criteria pollutant, and where a NESHAPs pollutant is part of the criteria pollutant stream, the emissions baseline for emissions of the hazardous pollutant from that source would be the lower-of-actual-or-NESHAPs-allowable emissions of that pollutant, applied as of the time of application for credit. Where EPA has *proposed* to regulate a source category for emissions of a pollutant under section 112, but has not yet promulgated a NESHAP for that source category, the proposal will serve as the interim guideline for evaluating the potential effects of any proposed emissions trade involving sources to which the proposed standard would apply. The emissions baseline for such a pollutant emitted by a source subject to the proposed NESHAP would be lower-of-actual-or-proposed-NESHAPs-allowable emissions for that pollutant.

In general, such trading proposals will be approved so long as they (1) result in emission limits for *each source* emitting the relevant pollutant which are equivalent to or less than those that the approved NESHAP requires or the proposed NESHAP would require if promulgated, (2) rely only on reductions below actual or allowable levels (whichever is less) of that pollutant, and (3) take place within a single plant or contiguous plants.

Where a pollutant has been *listed* under section 112 or EPA has published a Notice-of-Intent-to-List, but no NESHAP has been promulgated or proposed for a source which emits that

[38] In determining "significant" impact for Level II *bubble* trades, states may use the following significance values to identify trades whose potential ambient impact need not be further evaluated before approval:

10 μg/m³ for any 24-hour period for particulate matter;

5 μg/m³ for any annual period for particulate matter;

13 μg/m³ for any 24-hour period for SO_2;

46 μg/m³ for any 3-hour period for SO_2;

3 μg/m³ for an annual period for SO_2;

575 μg/m³ for any 8-hour period for CO;

2300 μg/m³ for any 1-hour period for CO;

0.1 μg/m³ for any 3-month period for Pb.

See 45 FR 52709 (August 7, 1980). For *offset* transactions, any required modeling must follow procedures consistent with EPA's new Source Review regulations in 40 CFR 51.18 or Part 51, Appendix S, or parallel EPA-approved state regulations. "Significant" impact under 40 CFR Part 51, Appendix S is defined as 1 μg/m³ annual average for particulates, SO_2 or NO_2; 5 μg/m³ 24-hour average for particulates and SO_2; 25 μg/m³ 3-hour average for SO_2; and 0.5 mg/m³ 8-hour average and 2 mg/m³ one-hour average for CO.

[39] However a bubble ordinarily may not be approved under Level II where other evidence related to background—i.e., formally validated ambient air quality monitoring data or previously established background values—clearly indicates that the bubble would create a new violation of an ambient standard or PSD increment, or would delay the planned removal of an existing violation.

[40] Other techniques may be approved where sources show they equally well protect NAAQS, applicable PSD increments, and visibility. For example, in limited circumstances conservative screening models may be acceptable in lieu of MPTER and ISC. In such cases, use of a full year of meteorological data may not be necessary. Such screening models may be acceptable where: (a) The screening model shows that all the emissions from the stack(s) with increasing emissions would not produce exceedances of the Level II significance values described in n. 38 above, *or* (b) the stack parameters at the stack(s) with increasing emissions do not change *and* the screening model shows that the increase in emissions at the increasing stack(s) would not produce exceedances of these significance values.

[41] See discussion in I.B.1.c. below.

[42] Where a Level III modeling analysis submitted to support a voluntary trading application indicates an exceedance of an ambient requirement, EPA will review such applications on a common-sense case-by-case basis, seeking to encourage disclosure of such exceedances and avoid undue delay of decisions on the trade, while adequately ensuring protection of public health, the integrity of the SIP process (including the state's prerogatives in determining how to remedy nonattainment), and the prompt and effective remedy of any condition of nonattainment. In its review, the Agency will take into account such factors as the degree of exceedance, the contribution of the trading sources and the trade itself to the exceedance, and the degree to which such sources would be part of any solution remedying the exceedance.

[43] Where a proposed bubble increasing net baseline emissions cannot meet this test of ambient equivalence, it may not be approved as a bubble under the Emissions Trading Policy. However, sources may still submit such revised limits for approval under the Source Requirements applicable to SIP revisions.

pollutant, states may generally allow trades consisting of equivalent increases and decreases of actual emissions of that pollutant within a single plant or contiguous plants. Once the relevant NESHAP is promulgated, every source, regardless of any previously approved trade involving emissions of that pollutant, must meet the requirements of that promulgation.

Where EPA has decided that one or more source categories which emit a listed pollutant do not require regulation solely because of limited national exposure, emissions of that pollutant will continue to be treated the same as emissions of any other pollutant listed under section 112.

Where EPA has issued a formal Notice-of-Intent-Not-to-List a pollutant under section 112, that pollutant will ordinarily be treated as non-hazardous. *However*, where the decision not to list or not to regulate was based on limited national exposure, but the individual risk was sufficiently high that EPA committed in the announcement of its decision to support (through some formal mechanism such as a Memorandum of Understanding (MOU)) state-level efforts to develop regulations, the pollutant will be treated as listed for trading purposes in order to assure that such state efforts are not compromised. The model for the intended scope of this classification is EPA's acrylonitrile decision. (50 FR 24319; June 10, 1985).

If a substance is neither listed nor regulated as hazardous under section 112, nor meets any of the other conditions specified above, but has been formally listed or regulated as toxic under any comparable health-based federal statute, the Administrator may consider this fact in evaluating trades which may increase emissions of that substance. This authority has not been delegated within EPA by the Administrator. See Clean Air Act section 301(a)(1), 42 U.S.C. 7601(a)(1).[44]

Exception. Trades which involve the pollutants addressed in this section but do not meet the special restrictions discussed above, may also be approved where surplus reductions in those pollutants compensate for increases in non-hazardous emissions of the same criteria pollutant. For example, a source emitting benzene may trade with a source emitting a non-hazardous VOC without meeting these special restrictions, if the benzene emissions are reduced as a result of the trade (i.e., "traded down"). As long as such a trade would not result in an increase in either actual or allowable emissions of a pollutant subject to the preceding paragraphs at any source, it would not differ in nature or requirements from a trade involving only non-hazardous VOC emissions.

e. Existing-Source Credits Cannot Be Used to Meet Applicable Technology-Based Requirements for New Sources. Under Clean Air Act section 111 and EPA implementing regulations, new affected facilities must satisfy technology-based New Source Performance Standards (NSPS), regardless of the attainment status of the area in which they are located. Under sections 165 and 173 and EPA implementing regulations, new or modified major sources must also satisfy technology-based control requirements associated with preconstruction permits. These requirements prohibit use of credits from existing sources to meet or avoid applicable NSPS, and bar use of such credits to meet applicable new source review requirements for best available control technology (BACT) in PSD areas, or lowest achievable emission rate control technology (LAER) in nonattainment areas.[45]

However, modifications of existing major sources in PSD and nonattainment areas with an EPA-approved "plantwide" definition of source can use "contemporaneous" reductions in actual emissions from within the same source to "net out of" New Source Review.[46] Under such "netting," sourcewide increases in potential emissions that do not exceed designated levels of significance (see 40 CFR 51.18(j)(1)(x), 51.24(b)(23), and 52.21(b)(23)) will not be considered "major modifications" of the source under 40 CFR 51.18, 51.24, 51.22, 51.307, 52.26, or 52.27. Thus, while these source changes must still meet applicable NSPS, NESHAPs, preconstruction applicability review requirements under 40 CFR 51.18 (a)–(h) and (l), and SIP requirements, they are not subject to new source review requirements for major modification because they are not considered "major."[47]

f. Trades Involving Open Dust Emissions. Trades involving open dust sources of particulate emissions may be approved through case-by-case SIP revisions based on modeled demonstrations of ambient equivalence. Sources proposing such trades must commit, as part of the trade's approval, to (i) undertake a post-approval monitoring program to evaluate the impact of their control efforts, and (ii) make further enforceable reductions if post-trade monitoring indicates initial open dust controls do not produce the predicted air quality results.

g. Interstate Trades. EPA will approve trades which involve sources located in neighboring states where such trades meet the criteria below and all other approval criteria applicable under today's notice. Where state trading requirements differ, EPA will require that trades with increasing and decreasing sources in different states meet the substantive requirements of the more stringent state. In general, in order to avoid complex accounting problems, EPA will deem ERCs created in another state to contribute to progress in the state where used, to the extent of that use. Such trades must be accomplished through case-by-case SIP revisions.

[44] Trades involving emission streams partially or wholly composed of any pollutants subject to special considerations under this section must meet two separate and distinct tests to be approved. First, such trades must be approvable under the criteria and principles which apply to all trades, as discussed throughout this policy (i.e., such trades must meet baseline and other requirements for the relevant criteria pollutant). Second, such trades must be approvable with respect to the hazardous pollutant fraction of the criteria pollutant emission stream. This means that there must be no net increase in emissions of the pollutants addressed in this section, as a result of such trades. Where a NESHAP has been promulgated or proposed, the baseline for determining whether such an increase has occurred is the lower-of-actual-or-NESHAPs-allowable emissions for the hazardous component of the trade, for the source which emits that component. The promulgated or proposed NESHAP limit not only is used to define the allowable emissions for that source, but serves as an absolute ceiling on the source as well. Where a NESHAP has not yet been promulgated or proposed, the baseline for determining whether such an increase has occurred is generally actual emissions for the hazardous pollutant component of the trade. But cf. today's Policy Statement at n. 8.

[45] Today's notice does not address whether or under what circumstances facilities subject to NSPS, BACT or LAER may surpass applicable permit limits reflecting such requirements in order to create credits for existing-source trades.

[46] "Contemporaneous" means a reasonable period for accumulating increases and decreases in emissions, as specified by the state. See 40 CFR 51.18(j)(1)(vi) and 51.24(b)(3)(b) (ii).

[47] Netting also applies under the narrower "dual definition" of "source" in certain circumstances. For example, firms may use reductions within the plant to compensate for increases at several emitting units which, while not individually significant, might otherwise add up to a significant increase plantwide.

Under current EPA regulations, if a nonattainment area is subject to a moratorium on new preconstruction permits for major sources or modifications and the area does not have an approved New Source Review program, then the area automatically uses a plantwide definition. See 40 CFR 52.24.

EPA's general expansion of opportunities for states to use the plantwide source definition for certain nonattainment areas (49 FR 50768, October 14, 1984) was affirmed by the U.S. Supreme Court on June 25, 1984. *Chevron U.S.A., Inc. v. Natural Resources Defense Council*, 104 S. Ct. 2778, 14 ELR 20507, *overruling Natural Resources Defense Council, Inc. v. Gorsuch*, 685 F.2d 718, 12 ELR 20942 (D.C. Cir. 1982).

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2. Procedural Steps for Using ERCs

Bubble trades may be implemented through individual SIP revisions or state generic rules. This section describes principles applicable to either procedure. General principles for generic rules are addressed in Section II below. Special considerations for trades which require individual SIP revisions are addressed in Section III.

a. Effect of Existing Compliance Schedules. EPA's 1979 bubble policy required that sources be subject to binding compliance schedules based on original SIP emission limits before being eligible to apply for bubbles. Because of the time required to process bubble applications as case-by-case SIP revisions, this requirement tended either (a) to discourage sources faced with tight milestones for the installation of conventional control equipment from pursuing bubble applications, where they had agreed in good faith to SIP compliance schedules before discovering bubble opportunities, or (b) to discourage sources from agreeing to any compliance schedule until they had fully examined bubble opportunities.

Today's policy allows an application to be filed though the applicant is not subject to compliance schedules based on original SIP emission limits, so long as that applicant agrees to emission limits established as part of a complete bubble application. Sources which are already subject to binding compliance schedules should, however, be aware that submittal or proposed approval of a bubble application does not suspend their obligation to comply with such schedules. Such schedules and existing SIP requirements remain applicable and enforceable until the bubble is finally approved and the schedule has been modified accordingly.

Sources seeking trades should note that they remain subject to enforcement of existing (pre-trade) SIP limits until the bubble is approved. EPA will use the same principles and procedures for deciding whether to initiate enforcements actions in these circumstances as the Agency applies to any other source which is subject to a proposed SIP revision.

Under established EPA policy, regulated sources must be subject to an applicable enforceable emission limit at all times. Accordingly, sources which have approved bubbles with emission limits effective at future date and which are not in compliance with their pre-trade limits, may be subject to enforcement action, which could include penalties based on a failure to meet the pre-trade limits. Sources in such situations may wish to minimize the chance that capital expenditures will be required to meet pre-trade limits, either by (a) agreeing to post-trade compliance dates which are substantially similar to their pretrade compliance dates, or (b) accelerating their compliance with post-trade limits.

In accord with the general principle that bubbles should be treated neither more nor less stringently than other SIP actions, implementation of today's policy will be neutral with respect to EPA enforcement of pre-trade emission limits. This means that EPA will not specifically target for enforcement action non-compliant sources seeking to use a bubble either to come into compliance or to restructure traditional compliance. However, it also means that EPA will not withhold or defer enforcement simply because a source is seeking alternative emission limits through a bubble. In exercising its enforcement discretion, EPA will apply the same considerations to noncompliant sources which seek to comply through bubbles as to those which do not.[49]

b. Extensions of Compliance Deadlines. States may modify or extend compliance schedules or deadlines for individual sources on a case-by-case basis in conjunction with bubble approvals. Such modifications or extensions must be consistent with the requirements of 40 CFR 51.15. Compliance schedules for sources in *nonattainment* areas cannot be extended beyond the statutory date for attainment, and applicable compliance milestones must be specified and met for each year of the revised or extended compliance schedule. Because an extension will usually require a revision of the state's progress demonstration, such approvals must ordinarily be submitted as SIP revisions.

[48] While sources involved in a trade, like all other sources, may be subject to requirements for additional emission reductions, neither previous trades approved by EPA or by states under EPA-approved generic rules, nor emission reduction credits used as part of a bubble, offset or netting action, should be terminated.

Such termination could occur, for example, where two sources in a given source category were subject to pre-bubble mass emission limits of 100 TPY each and post-bubble limits of 50 TPY and 150 TPY respectively. Assume the state imposes a new category-wide regulation which would normally limit those sources to 40 TPY each. In this case, the first source should be required to meet the new 40 TPY limit (i.e., it should be required to produce additional reductions of 10 TPY), while the second source should be subject to a new limit of 90 TPY (i.e., a level reflecting the continued existence of the 50 TPY emission reduction credit). Termination of the emission reduction credit would occur either by requiring the first source to produce additional emission reductions of 60 TPY (i.e., more than its current level of emissions), or the second source to meet the 40 TPY limit. Either of these results would undermine the purpose of today's notice by eliminating the predictability required for generation or use of ERC's. They could also penalize trading sources for taking environmentally beneficial measures sooner than required, since it would often be more difficult to achieve the new reductions than had earlier voluntary steps not been taken.

For these reasons, EPA urges states not to take such credit-terminating actions unless there is no [illegible]er practical way to satisfy the requirements of [illegible] Clean Air Act.

[illegible]day's procedures for deposit and use of banked [illegible]s already address additional state emission reduction needs in the context of banking (see section I.C.9. below). States should, however, account for all previous trades and previously granted emission reduction credits in estimating emission reductions resulting from new control strategies, in order to avoid problems due to double-counting.

[49] Parties contemplating bubbles involving the trade of emission reduction credits from one firm to another should be aware that when the credits being provided by the first firm are the result of emission limits with a future compliance date, the obligation to meet pre-trade limits remains with the second firm (which may face enforcement action, including cash penalties, for failure to comply with those pre-trade limits) until the time specified for the first firm to achieve the reductions necessary for compliance under the bubble. The first firm's failure to achieve required bubble reductions on schedule may thereafter result in enforcement action (including cash penalties) against that firm. *However*, this paragraph should be read in conjunction with the general principle articulated above that EPA implementation of today's policy will be neutral with respect to enforcement of pretrade limits.

In *nonattainment areas*, states which wish to give sources more time to implement bubbles by granting compliance extensions must receive EPA approval of the extension through case-by-case SIP revisions. EPA will evaluate the time extension portions of these SIP revision packages in accordance with the Agency's normal procedures for review of time extensions, including consistency with the Act's requirements of expeditiousness, reasonable further progress, and attainment and maintenance of ambient air quality standards. Sources should be aware that disapproval of the time extension portion may result in disapproval of the entire package (i.e., both post-trade limits and the time extension) or only part of it, depending on whether the state views these components of the proposed SIP revision as separable.

In *attainment areas*, states may continue to grant compliance extensions without case-by-case SIP revisions, as part of bubble approvals under a generic rule. Such generic compliance date extensions may be granted in these areas only if EPA has approved the extension provision of the generic rule as adequate to comply with the Clean Air Act, including requirements for attainment and maintenance of ambient air quality standards.

c. Pending Enforcement Actions. A bubble cannot be approved for an individual emission source which is presently the subject of a federal enforcement action or outstanding enforcement order unless EPA (and where necessary the appropriate court) approves the proposal and any compliance schedule it may contain. "Federal enforcement action or outstanding order" includes notices of violation, civil actions filed under Clean Air Act section 113(b), criminal actions filed under section 113(c), notices imposing noncompliance penalties issued under section 120, administrative orders issued under section 113(a), or citizen suits filed under section 304 in which EPA has intervened if the source is subject to an administrative or judicial order.

This requirement need not preclude bubble approvals under generic rules, provided the rule specifies an appropriate mechanism for securing and recording EPA or court approval.[50] Sources should, however, be aware that such approvals cannot be finally effective until approved by the appropriate agency or court, and that they remain subject to original emission limits until such approval.

C. Banking Emission Reduction Credits

Emission reductions that are surplus, permanent, quantifiable and enforceable can qualify as emission reduction credits (ERCs) and be deposited in EPA-approvable banks. States may establish such banks by adopting appropriate rules to govern whether and how sources may own and hold surplus emission reduction credits for future use in bubble, offset or netting transactions.[51] Such banking rules may encourage sources to take measures to reduce emissions in advance of specific need for ERCs, resulting in lower transaction costs for those seeking offsets, bubbles, or partners for these transactions. States should, however, be aware that because an area's air quality situation or the status of its SIP may change in the future, failure to account for banked credits in emission inventories used for planning purposes may result in loss of those ERCs not treated as "in the air" (e.g., not included in any future SIP inventory or accounted for in any redesignation of the area to attainment), due to double-counting. Banking rules may protect such reductions in whole or in part as long as such protection is consistent with the Act's mandate to attain and maintain ambient standards while protecting PSD increments and visibility.

EPA-approvable banks can accept and evaluate requests to certify an ERC, serve as a clearinghouse for credits on deposit, and account for transfers and withdrawals of ERCs.[52] Banks can also: Register ERCs to ensure they are considered as current actual emissions in future planning (thus providing the greatest technical measure of protection to those ERCs); notify prospective purchasers of the existence of ERCs; and account for transfers and withdrawals. These roles will generally be performed by the state as part of its normal permitting activities. *Use* of banked credits must meet all the criteria of the particular SIP regulatory program under which they are to be used.[53]

The following sections address both minimum requirements for state banking rules which are approvable by EPA, and issues states should consider. States may adopt other approaches which produce equivalent results.

1. Banking Rules Must Designate an Administering Agency

Banking rules must identify the entity responsible for specific functions. While the state will ordinarily be responsible for verifying and processing ERC requests, all or part of this responsibility may be delegated to other organizations. Such organization(s) must possess the resources and legal authority to implement delegated activities.

2. Only ERCs May Be Banked

Banked emission reduction credits must be surplus, permanent, quantifiable, and enforceable by the state by the time they are banked.[54] However, if a source commits to produce a specific reduction at a specific time in the future, a state may allow a conditional deposit to be made. Procedures for such conditional deposits must ensure that they do not

[50] See section II.B.3 below.

[51] States may incorporate EPA-approvable banking rules in the SIP by submitting them for approval as SIP revisions.

Emission reductions banked through a formal or informal banking mechanism prior to a state's adoption of EPA-approvable banking rules may qualify for deposit in the EPA-approvable bank so long as (1) the source shows that its reductions are surplus, permanent, quantifiable and enforceable; and (2) the state shows that these reductions have not already been assumed or otherwise double-counted in the SIP.

[52] States and sources should be aware that because of differing regulatory requirements, the amount of credit actually derived from particular emission reductions may differ from one regulatory program to another. For example, in primary nonattainment areas needing but lacking approved demonstrations, the amount of credit from a given reduction which is available for bubble purposes may be less than that available from the same reduction for offset or netting purposes, since special progress requirements apply to bubbles in these areas.

[53] States may, however, expand opportunities for use of banked credits beyond those of current SIP programs (e.g., extend the "contemporaneous" period for netting), by submitting revised regulations addressing the banking and use of such credits, for approval as SIP revisions.

[54] In primary nonattainment areas which need but lack approved demonstrations, emission reductions made prior to application to bank or trade (whichever is earlier) will not be credited for use in bubbles (see section I.A.1.c.(1) above). Following publication of today's notice, the "date of application to bank" will be the date the source submits an application to the state to make a reduction state-enforceable through or concurrent with use of a formal bank or informal banking mechanism (see section I.A.1.b.(1) above).

In other areas, although emission reductions cannot qualify as ERCs or be deposited in EPA-approvable banks until they are made enforceable by the state, emission reductions banked through other formal or informal banking mechanisms will still be eligible for use in future trades, so long as those reductions are made federally enforceable at their time of use and all applicable requirements of the regulatory program under which they will be used are met. Since states may have to revise their regulations or permit procedures in order to implement this new definition, full implementation will not be expected until one year after publication of today's notice. However, all credits not made enforceable when banked during this interim period should ultimately be made enforceable within eighteen months from today's notice. Emission reductions currently deposited in banks should also be made enforceable by the state within eighteen months from the date of this policy.

compromise the state's ability to secure through further regulation any future reductions which may be needed.[55] In all cases the reduction must be made federally enforceable by the time the emissions trade which relies upon it is finally approved.

3. *Possible Limitations on Use of ERCs for New Source Permitting*

Use of banked ERCs for new source permitting must be consistent with applicable regulations approved by EPA under 40 CFR Parts 51 and 52. For example, under 40 CFR 51.18(j)(3)(ii)(c) shutdowns that occur prior to applications for a new source permit may ordinarily be used only as offsets for replacement facilities, and then only if the permit application was filed within one year after the shutdown occurred or if the reduction occurred after August 7, 1977.[56]

4. *Sources Should Apply to Bank Surplus Reductions As Soon As They Decide To Make Them*

For administrative simplicity and accurate quantification, sources should apply to bank reductions as soon as possible after they decide to make them. The administering agency should formally note the source's intent to make a surplus reduction, as expressed in the application. The state must then verify whether and to what extent the reduction actually occurred, and must make the reduction enforceable by the time it is accepted for deposit.

5. Procedures for Banking Surplus Emission Reductions Should Be Defined

To speed approval of trades and provide greater certainty for potential ERC creators and users, state banking rules should clearly specify which proposed emission reductions can qualify to be credited and banked, the information required of sources to substantiate their claim for credit, and any required application forms. At minimum, such rules must require firms to maintain records (e.g., production records and records of previous emission tests) adequate to determine the pre- and post-reduction actual and allowable values for emission rate, capacity utilization, and hours of operation for the source generating the ERC.

6. Banking Rules May Establish Ownership Rights

To prevent two entities from claiming or attempting to use the same ERCs at the same time, state banking rules may specify who can own ERCs. For example, while the source creating the ERC will generally be its owner, the state could, as part of its rule, reserve ownership of certain classes of ERCs to itself or local governments. States considering the latter course should carefully weigh whether such reservations are likely to increase or diminish future reductions and air quality management capabilities.

7. Banking Rules Must Establish an ERC Registry or Its Equivalent

An ERC registry or equivalent instrument allows states to track ownership, use, and transfer of all banked ERCs. Banking rules may provide that no transfer of title to a banked ERC will take effect until the transaction is reflected in the registry. This tracking system can minimize potential disputes and provide a central list of certified ERCs which may be available to potential purchasers. It can also provide useful information for quickly evaluating any proposed use of a banked ERC.

Information which may help evaluate future proposed uses of a banked ERC should be recorded at the time of its creation and entered as part of its banking record. This information should include the location of the source creating the ERCs; whether the reduction is due to a shutdown or curtailment; the date the reduction occurred or will occur (to allow future determination of the timing of the reduction with respect to the application for credit or its contemporaneity for use in netting or, if a shutdown, as an offset); the source's stack parameters; the temperature and velocity of its plume; particle size; the existence of any hazardous pollutants; daily and seasonal emission rates; and other data which might reasonably be deemed necessary under the requirements described in sections I.A. and I.B. above to evaluate future use.

To perform these tracking and clearinghouse functions the ERC registry must be accessible to the public. Subject to confidentiality considerations, states should make copies of the ERC registry available at convenient locations and times, and may want to publish or otherwise issue a periodic summary of banked ERCs.

8. Possible Adjustments to ERCs Based on Enforcement Considerations

Banking rules should state what, if any, changes may occur to ERCs after they have been banked. Once an ERC has been used by another source to meet a permit or other regulatory requirement, any violation of the conditions under which that ERC was created should result in enforcement against the source producing that ERC and not the source using it. If a state attempted to enforce against the source using purchased ERCs, a complex set of third-party lawsuits would likely ensue.[57]

9. Possible Adjustments to ERCs Based on Ambient Attainment Considerations

To assure the validity of its demonstration(s) of progress or attainment, a state with a banking rule must assume that all banked emissions will ultimately be used. In evaluating their ability to attain national standards, such states must add to their emissions inventory or measured ambient values all unused banked reductions at the site at which they were created. This is especially important for areas requesting reclassification from nonattainment to attainment. Failure to account for banked reductions as "in the air" for SIP planning purposes would ordinarily eliminate their use as ERCs following a new SIP design or inventory year, due to double-counting.

Additional emission reductions may be required from sources because of their area's failure to attain ambient standards, because of an increment violation, because of existing visibility impairment, or because new RACT requirements are being imposed under a SIP schedule. The existence of banked ERCs must not interfere with states' ability to obtain these additional reductions, and a state's rules on treatment of banked ERCs must provide it the necessary flexibility to meet future requirements. However, state banking rules may address, within this criterion, how banked ERCs will be treated if

[55] States have several available options to provide such assurance. They may, for example, bar conditional deposits from source categories which are subject to pending regulation. Alternatively, they may allow unrestricted conditional deposits but write future regulations in terms of RACT-equivalent reductions (e.g., an 80% reduction in current actual emissions) rather than in terms of specific control strategies or emission levels. The latter approach can avoid possible claims by some sources that no further control is required, while strengthening the state's ability to encourage further voluntary reductions as well as mandate needed ones. See section I.C.2.b below. States may adopt whichever alternative satisfies these concerns in their particular situation.

[56] See n. 14 above.

[57] Moreover, conflicting private-party attempts to assess ultimate responsibility for required reductions could make the purchased ERCs unenforceable and result in restoration of the creating source's original (higher) emission limits, due to claims that surplus reductions were produced in reliance on government rules implying their reasonable merchantibility and use. For these reasons emission limits altered as a result of the creation and use of ERCs must remain final and enforceable against the creator of those ERCs, so far as EPA is concerned.

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ditional reductions are required to ı and maintain NAAQS, protect increments, or improve visibility. Available options include:

a. ERCs Generated Prior to the Design or Baseline Year Could be Eliminated. The use of ERCs generated prior to the design or baseline year is unlikely to be consistent with the state's demonstration, unless the state included such ERCs as "in the air" for planning purposes at that time.

b. ERCs Could be Guaranteed Against Adjustment. The state would determine the necessary quantity of reductions from individual sources and source categories and require these reductions from actively emitting sources. Banked credits previously created by sources would be fully preserved. Emitting sources could then satisfy new requirements for reductions either by reducing emissions directly or by using or purchasing equivalent ERCs.

In implementing this option, it would be particularly important for states to adjust downward the estimated total reductions due to these new regulatory requirements, in order to reflect reductions previously achieved as a result of banking actions. Alternatively, states could phrase new control requirements in terms of equivalent tion results (e.g., "RACT-equivalent" reductions in nonattainment areas) as well as specified control techniques or emission levels. Under this approach necessary additional control requirements would be expressly stated in terms of additional reduction responsibilities, to be met without regard to prior trades.[58]

c. Use or Deposit of ERCs Could be Temporarily Suspended. States may suspend either ERC use or future ERC deposits until the state has committed in its SIP to secure reductions sufficient to reestablish progress or cure an increment violation. Use of either type of moratorium would be consistent with air quality objectives while allowing sources to retain and eventually use their entire quantity of banked ERCs. However, these options may be undesirable because of uncertainty regarding the moratorium's start, duration, or potential interference with user planning. This may be especially true where a moratorium on use (rather than deposit) is imposed after ERCs have been banked.

d. Across-the-Board Discounting. Under this option, the state could discount all ERCs in the bank by the same factor. For example, if a 10% ional reduction is required from a particular category of sources for the SIP's new demonstration, the state would discount all currently banked ERCs from those types of sources by 10%. Although the quantity of ERCs held by a firm will be reduced, the overall supply of ERCs will decrease, while demand will increase. Indeed, other sources may seek to purchase banked ERCs from creating sources, in order to meet the 10% reductions required of them. Thus, the price per unit of remaining ERCs is likely in many cases to increase.

This option is relatively straightforward for VOC or NO_x. For SO_2 or particulate matter more detailed, source-specific modeling would generally be required to allocate the discount necessary to demonstrate attainment.

States may adopt any of these methods of accommodating possible additional reductions. They may also adopt any equivalent method which achieves the same objectives.[59]

II. Trades Covered by State Generic Rules

This section explains how states may develop EPA-approvable generic rules under which classes of emissions trades may be exempt from the general requirement for subsequent EPA approval as case-by-case SIP revisions.

A. General Principles for Evaluating Generic Rules

A generic rule is approvable if it assures that emissions trades otherwise requiring case-by-case SIP revisions under sections 110(i) and 110 (a)(3) of the Clean Air Act will be evaluated under state procedures that are sufficiently replicable in operation to guarantee that emission limits produced under the rule will not interfere with timely ambient attainment and maintenance or jeopardize PSD increments or visibility. Replicability generally means a high likelihood that two decision-makers applying the rule to a given trade would reach the same conclusion. For one example of a generic rule incorporating a very simple formula that meets tests of replicability, see 46 FR 20551 (April 8, 1981). In relation to generic bubble rules, this means that specific modeling procedures or surrogates are prescribed and that states have appropriately defined their choice of models, model inputs, and modeling techniques in applying these procedures to specific trades. Thus these trades should not create new ambient violations of standards or increments, delay the planned removal of existing violations, or degrade visibility in Class I areas. By approving such generic rules, EPA approves in advance an array of acceptable SIP emission limits, and no further SIP revision is required for trades which meet the terms of the state's approved rule.

EPA will comment on trades proposed under generic rules, conduct reviews of trades approved under those rules, and audit the implementation of these rules as part of its routine audits of other state air programs. See Section E below.

B. Scope of Generic Rules

States may use a range of mechanisms to exempt bubble trades from individual SIP revisions. While several general mechanisms are explained below, states may submit other generic rules that satisfy these basic principles. See section II.D below for specific requirements for generic rules in primary nonattainment areas which need but lack approved demonstrations.

1. VOC or NO_x Trades

VOC or NO_x trades approved by states under a generic rule that assures no net increase in applicable baseline emissions may occur without case-by-case SIP revisions.

The ambient impacts of VOC and NO_x emissions are areawide rather than source-specific. All such emissions within a broad area are considered comparable, regardless of plume height, topography or related factors. Thus, the ambient impact of trades involving emissions of VOC or NO_x from different sources within such an area will by definition be equivalent to that of the sum of applicable baseline emission limits for the sources involved in the trade.

For VOC and NO_x such pound-for-pound trades may therefore be treated under generic rules as equal in ambient effect where all sources involved in the

[58] See footnote 55 above.

[59] The preceding discussion generally assumes the bank is located in an attainment area or nonattainment area with an approved demonstration. In primary nonattainment areas which need but lack approved demonstrations, use for bubble purposes of banked shutdown or other credits which meet relevant requirements of today's notice will similarly be allowed. See section I.A.1.c.(3) above. Bubbles in these areas will already be subject to special progress requirements. However, in order to accommodate possible additional reduction requirements in other areas in a manner consistent with banks, states may voluntarily adopt such an approach for bubbles prior to the issuance by EPA of any formal notice of SIP deficiency mandating such requirements. States may also choose (as some have already done) to specify greater than 1:1 trading ratios for bubbles, offsets or netting. While this approach would not adjust the total amount of credit available in a bank, it can substantially enhance SIP planning efforts and provide a net air quality benefit by reducing the amount of emissions that can ultimately be returned from the bank to the air.

trade are located in the same control strategy demonstration area, or where replicable procedures have been approved by EPA as part of the generic rule for determining when sources outside the demonstration area are sufficiently close that a pound-for-pound trade can be justified.[60]

In general, generic VOC trading rules must require that surface coating emissions be calculated on a solids-applied basis. The rule should also specify the maximum time period over which emissions may be averaged in an acceptable compliance demonstration. For VOC that averaging time should not exceed 24 hours unless the rule contains language approved by EPA that expressly allows a longer averaging period. See Appendix D below.

2. Particulate, SO_2, CO or Pb Trades

Classes of particulate, SO_2, CO and lead (Pb) trades may also be exempt from SIP revisions if they are approved under a state generic rule which assures that valid ERC uses cannot reasonably interfere with attainment and maintenance of air quality standards or jeopardize PSD increments or visibility.[61]

De Minimis Trades. Trades of particulates, SO_2 CO or lead (Pb) in which applicable net baseline emissions[62] do not increase and in which the sum of the emission increases, looking only at the increasing sources, totals less than 25 tons per year (TPY) for particulates, 40 TPY for sulfur dioxide, 100 TPY for carbon monoxide, or 0.6 TPY for lead (Pb), after applicable control requirements, may proceed without modeling and case-by-case SIP revisions.[63] Such trades will have at most a *de minimis* impact on local air quality because they will produce no net increase in emissions and the amount of emissions being shifted is not significant in ambient effect under associated EPA regulations. See 45 FR 52745 (August 7, 1980).[64]

Level I Trades. The ambient impact of particulate, SO_2, CO or Pb emissions depends on site-specific factors such as topography and plume height which are ordinarily evaluated by ambient dispersion modeling. However, if applicable baseline emissions do not increase, sources are located in the same immediate vicinity, and all other Level I requirements discussed in section I.B.1.b.(2) above are met, it can reasonably be assumed that "pound-for-pound" trades will produce ambient effects equivalent to those which currently approved air quality models would predict. As a result, trades meeting the criteria in section I.B.1.b.(2) above may be treated in the same manner as generic VOC and NO_x trades, and exempted from modeling and case-by-case SIP revisions.

EPA will normally approve generic rules that define "same immediate vicinity" as up to 250 meters between individual emission sources involved in a trade.

Level II Trades. Other particulate, SO_2, CO and Pb trades may also be exempted from case-by-case SIP revisions if they meet the Level II criteria in section I.B.1.b.(3) above and can routinely be modeled in a prescribed manner. The state's generic trading rule must specify the particular refined model that will be employed in a given situation, or criteria for selecting models in specified circumstances. To limit variability in modeling results the rule must also require at least a full year of meteorological data, identify the sites for that data, and specify procedures for selecting input data (e.g., wind speed, stability class, source emission rate) which are sufficiently defined to satisfy replicability concerns.[65] In some limited circumstances, a sufficiently conservative screening model could be specified as part of the generic rule. See section I.B.1.b(3) above.

Level III Trades. Because of the wide variability in data input and use inherent in full-scale dispersion modeling, Level III trades must be processed as individual SIP revisions. But cf. sections II.B.4 and III below.

3. Limits on Trades Exempt From SIP Revisions Under Generic Rules.

Because some trades cannot readily be addressed in a replicable manner, the following may *not* in general be exempted under generic rules from the requirement for case-by-case SIP revisions:

a. Particulate, SO_2 CO or Pb trades requiring full-scale dispersion modeling under Level III (see section I.B.1.b.(4) above);

b. Particulate, SO_2, CO or Pb trades where complex terrain[66] is within the area of the source's significant impact or 50 km., whichever is less, unless the trade does not result in a modification of effective stack heights and the trade otherwise qualifies as *de minimis* or Level I. The area of significant impact can be determined as noted in footnote 21 above and in Appendix E;[67]

c. Open dust trades; and

d. Level II trades involving process fugitive particulate, SO_2, CO or Pb emissions not discharged through stacks.[68]

In addition to the above, in order to protect the integrity of various SIP processes, the following types of trades may *not*, in general, be exempted under generic rules from the requirement for case-by-case SIP revisions: (1) Trades involving ERCs from mobile source measures, (2) trades involving emission sources which are the subject of an enforcement action manifested by issuance of a notice of violation, an administrative order or section 120 action, or the filing of a judicial complaint, unless the rule specifies an

[60] The discussion in this paragraph does not apply to certain NO_x trades involving visibility impaction due to elevated plumes.

[61] The ambient equivalence considerations elaborated in this and following paragraphs also apply to NO_x trades involving visibility impaction due to elevated plumes. See n. 60 above.

Unlike other critical pollutants, EPA does not designate nonattainment areas for lead. However, states must review lead trades, as all other trades, to assure that they do not interfere with attainment and maintenance of the NAAQS.

Generic state approvals of trades involving pollutants addressed in this subsection must be limited to sources which are located in the same or adjacent control strategy demonstration areas and the same general air basin.

[62] See n. 31 above.

[63] The *de minimis* level is 40 TPY for NO_x trades where visibility impaction due to elevated plumes is a consideration.

[64] This paragraph should not be construed to imply that *new* sources and modifications need not meet all applicable requirements, including those specified under 40 CFR 51.18 or parallel EPA-approved state rules.

[65] Because today's notice confirms the authority of states to use such EPA-approved refined models as MPTER, CRSTER or ISC to conduct the "daily, temporal, spatial analysis" of post-trade ambient impacts required under Level II, approval of generic rules incorporating Level II approaches should be less uncertain and burdensome than under the previous 1982 approach. See, e.g., Appendix C below.

[66] Complex terrain is broadly defined by EPA as terrain greater in height than the physical stack height of a source. For bubble purposes, this definition is applicable only to sources with an increase over baseline emissions.

[67] Generally, aside from the exception stated above, trades involving complex terrain as defined above may not be processed under generic rules. However, states may wish to develop and submit for EPA approval additional area-specific criteria for determining when trades involving complex terrain do not present problems of potential plume impaction, and therefore may be approved under generic rules as *de minimis*, Level I or Level II trades using a flat terrain model. These additional criteria would include such factors as source height and emission rate, distance between stack and elevated features, rate of topographical rise, and other considerations which may be appropriate for a particular geographic area. States are encouraged to work with EPA to determine whether, where and how much additional criteria can be developed and applied within their state. Unless EPA has formally approved such additional criteria for a given geographic area as part of a generic rule, states must apply the general restrictions stated above when processing trades in that area under the rule.

[68] See Appendix C.

appropriate mechanism for notifying EPA of the source's bubble application prior to formal state proposal and for securing and recording written EPA concurrence that the bubble meets all pertinent requirements of the generic rule, (3) interstate trades, (4) VOC trades with averaging times longer than 24 hours, unless a state generic rule expressly providing for longer averaging times has been approved by EPA, (5) trades involving work practice and equipment standards, unless a state generic rule containing a provision expressly providing for state evaluation of such trades in a replicable manner has been approved by EPA, and (6) trades involving negotiated RACT baselines. *However*, a state generic trading rule could specify "presumptive RACT" limits which acceptably define generic trading baselines where RACT has not otherwise been defined in the SIP. While RACT baselines different from this presumptive limit could still be used for specific trades, they would need to be approved as case-by-case SIP revisions. Where there is no RACT in the SIP, but EPA has issued a CTG for sources of the type involved in the trade, the CTG should be used as the presumptive RACT-component of the generic trading baseline.

To the extent necessary, EPA will issue notices requiring that existing generic rules be revised to reflect these restrictions. See section II.E.4. below.

4. Other Generic Mechanisms for Exempting Particulate, SO_2, CO or Pb Trades From Case-by-Case SIP Revisions

EPA will approve other generic techniques which are demonstrated to equally protect ambient standards, PSD increments, Class I areas, and visibility. For example, a state could approve a modeled formula for two or more specific emission sources which would satisfy ambient concerns while allowing firms to define specific permit limits at each covered emission source. Like other generic provisions, such a formula would have to be approved as part of the SIP. EPA encourages states to work with EPA Regional Offices where they seek to develop other generic mechanisms which meet the tests of replicability and ambient equivalence described above.

C. Enforcing Emission Limits Under Generic Rules

Alternative emission limits approved under generic rules are considered by EPA to be federally enforceable so long as the generic rule specifies the compliance instrument (permit limits, etc.) under which the conditions of the trade will be implemented and all substantive and procedural requirements of the approved rule are met. Generic rules must specify that such alternative limits become applicable requirements of the SIP under § 110 for purposes of sections 113, 120, and 304 of the Clean Air Act and are enforceable in the same manner as other SIP requirements. To assure that EPA and citizens know what emission limits apply, generic rules must also specify that, and in what manner, EPA will be informed of emission limits applicable before and after the trade. (For additional issues related to enforceability, see section I.A.2 above. For requirements related to opportunity for public comment, see section II.F. below).

D. Generic Bubble Rules in Primary Nonattainment Areas Which Lack Approved Demonstrations of Attainment

Generic rules will continue to operate in primary nonattainment areas which require but lack approved demonstrations of attainment, under the following conditions:

1. Bubbles approved under existing generic bubble rules prior to the effective date of today's policy will not be affected by today's requirements.

2. Bubbles submitted to states under existing generic rules may continue to be approved by states in accord with those rules, until such rules are finally changed, pursuant to specific formal EPA request, to meet the criteria listed below. Such rules must, however, as requested by EPA, be modified to meet the criteria below.[69]

3. Applications for new generic bubble rules applicable to these areas, and applications for generic rules now pending before EPA, will be approved provided they meet the criteria below and all other applicable requirements of today's policy.

Criteria for Approvable Generic Bubble Rules. New and revised generic bubble rules applicable to primary nonattainment areas which require but lack approved demonstrations of attainment must, for bubbles in those areas:

a. Use lowest-of-actual-SIP-allowable or-RACT-allowable emissions baselines for all sources involved in the trade;[70]

b. Using baseline emissions defined above, meet applicable *de minimis* Level I or Level II modeling tests for ambient equivalence, as appropriate;

c. Produce an overall emission reduction from each bubble equal (in percentage terms) to the larger of a 20% reduction in emissions remaining after applicable baselines, or to the overall emission reduction from controllable stationary sources (in percentage terms) needed to attain in the area (i.e., at least equal to the source-by-source emission reductions that would be required for a full demonstration of attainment, taking into account "uncontrollable" area or other stationary sources and expected emission reductions from mobil sources).[71] This determination must be

[69] In the interim, EPA expects states to ensure, so far as feasible, that bubbles approved under existing generic rules are consistent with this policy as well as with the terms of their EPA-approved rules. States should be aware that without this or similar precautions, continued approval of bubbles under existing generic rules containing identified deficiencies may create or accentuate plan deficiencies which may have to be corrected at a later date or compensated for by other means. See section E.4. below.

[70] For detailed discussion of these baselines, see section I.A.1.b. above and Appendix B.

[71] For example, assume air quality analysis indicates the area must decrease its base-year emissions by 45% to attain the relevant NAAQS. Further assume

	TPY
(a) For the base year:	
Uncontrollable stationary source emissions (e.g., residential combustion sources)	2,500
Controllable stationary source emissions	3,500
Mobile source emissions	4,000
Total	10,000
Target emissions for attainment 10,000×(1.0–0.45)	5,500
(b) For the projected attainment year (before additional controls):	
Uncontrollable stationary source emissions (2,500×1.1)	2,750
Controllable stationary source emissions (3,500×1.2)	4,200
Mobile source emissions	2,500
Total	9,450

Therefore the reductions needed from controllable stationary sources are 9,450–5,500=3,950 TPY

And the percent emission reduction required from controllable stationary sources to attain is

$$\frac{(3950)}{(4200)} \times 100 = 94\%$$

Thus the net overall reduction required from each generic bubble would be 94% (i.e., the reductions produced by applicable baselines (e.g., application of a RACT emission rate) plus whatever percent reduction in emissions remaining after this RACT limit is sufficient to yield the 94% total).

States that wish to avoid SIP revisions for sources for which RACT has not yet been defined in an approved SIP provision may incorporate "presumptive RACT" limits (e.g., 80% reduction for VOC) in their generic rules. Sources would then have the option of accepting these RACT limits for generic bubble purposes, or negotiating different RACT limits through the SIP revisions process. However, where a source involved in a trade is one for which EPA has issued a CTG, but the state has not yet adopted the CTG-specified limit as RACT and no RACT has yet been specified by the state for that source, the presumptive or negotiated RACT limit for the trade must be at least as protective as the CTG for that source.

submitted with the rule, and must use the same type and quality of analysis as that required for an EPA-approvable SIP; and

d. Provide assurances, in conjunction with the State's submittal of the generic rule to EPA, that the state (i) is making reasonable efforts to develop a complete approvable SIP that will achieve the percent emission reduction from controllable sources described in the previous paragraph and (ii) intends to adhere to the schedule for development of such a SIP (including dates for completion of emissions inventory and subsequent increments of progress), as stated in the letter accompanying the submittal or in previous letters. In addition, to ensure that generic approvals continue to complement and do not interfere with attainment planning, EPA will require the state to include the specific assurances listed at section I.A.1.b.(3) above in or with its notices of proposed and final approval of each bubble issued under the generic rule in such a nonattainment area.[72]

E. EPA Oversight of Generic Rules

In order to ensure proper implementation of EPA-approved generic trading rules, EPA intends to (a) examine and comment on, together with any other public commenter, the information provided for individual trades proposed under a generic rule, (b) conduct reviews of individual trades approved under such a rule, and (c) periodically audit the implementation of the generic rule itself.

1. EPA Comment on Trades Proposed Under Generic Rules

When processing emissions trades under generic rules, states are required to provide EPA and the public with adequate notice and opportunity to comment. See sections II.F. and II.G. below. EPA will use state procedures for notice and comment to oversee the implementation of generic rules without delaying state processing of trading applications.

The information which a state must provide to EPA by the first day of the comment period (see section II.G. below) is generally sufficient for EPA to determine that a trading application is being processed properly. Where this information is not sufficient, EPA may request the application itself, and the state must provide it promptly.

Where EPA elects to provide any comments on the proposed approval, it will do so in writing, by the close of the comment period specified in the state's notice. EPA may also testify at any public hearing held pursuant to the approval of a trading application under a generic rule. Trading applicants and state officials are strongly advised to address EPA's comments, and where necessary to incorporate an appropriate response to those comments in the final approval document.[73]

2. Reviews of Individual Bubbles Approved Under Generic Rules

Reviews of individual generic bubble approvals, apart from the regularly scheduled reviews associated with activities under EPA's National Air Audit System (see section II.E.3. below), may be conducted at any time by EPA in order to promptly address identified or suspected problems and to avoid patterns of improper approval or other adverse effects which might accumulate before the next biannual audit is conducted.

3. EPA Audits of the General Implementation of Generic Rules

Under the National Air Audit System, EPA conducts a program audit of each state agency responsible for implementing the SIP and delegated federal programs.[74] These audits are currently carried out on a biannual basis. As part of the National Air Audit System, EPA will conduct an in-depth file audit of a representative sample of generic trading approvals issued by the relevant state.

4. Deficient Generic Trades

As discussed above, generic rules can expedite the approval process for certain classes of emissions trades because they allow such trades to be approved by states without undergoing a subsequent federal rulemaking process. However, to be considered valid by EPA, a trade approved under a generic rule must:

(1) Be one of a class of trades which is within the scope of the generic rule,

(2) Be approved *after* the generic rule has been approved by EPA, and

(3) Meet all the provisions of the generic rule as approved by EPA.

If a state-approved emissions trade does not meet all these requirements it cannot be considered part of the SIP and by definition cannot replace prior valid emission limits in the SIP. See 46 FR 20554–55 (April 6, 1981). Should EPA determine, as a result of its oversight activities, that a state-approved trade is inconsistent with the above requirements, it will notifiy the state and source in writing and specify any necessary remedial measures. In such circumstances, EPA may take appropriate remedial action to assure attainment and maintenance, including direct enforcement of the original SIP limits.[75]

5. Deficient Generic Rules

Existing generic rules approved under previous EPA policy and guidance may require revision in order to make them consistent with today's final policy. In addition, a generic rule approved by EPA under the final policy may subsequently be found to be deficient in some respect. Because EPA-approved generic rules have independent force of law, they can only be amended upon completion of a formal SIP revision process.

In order to ensure that generic rules are consistent with the Agency's current Emissions Trading Policy, EPA will publish notices in the Federal Register which identify any generic rules requiring formal modification.[76] These notices will identify specific deficiencies and means for correcting them, and will set forth a schedule for submission and review of revised rules. These notices will alert affected states to the danger that continued processing of trades

[72] These four requirements must be included as a contingent provision in all future generic rules, with the contingency triggered to apply to bubbles in primary nonattainment areas which become subject to a SIP call questioning their approved demonstration, after the generic rule was approved.

[73] Lack of EPA comment during the comment period will not bar future appropriate EPA enforcement or rulemaking actions if the bubble is found to be inconsistent with the generic rule.

[74] See, e.g., National Air Audit Guidelines for FY 84, Office of Air Quality Planning and Standards, EPA–450/2–83–007 (November 1983).

[75] In some cases EPA may have approved state SIP provisions which meet the functional criteria for generic rules, without indicating whether or not those provisions were approved for generic operation. Today's notice does not address the effect of generic validity of such provisions.

[76] EPA's publication of such notices will not trigger special progress requirements for case-by-case SIP revision bubbles in areas other than primary nonattainment areas which require but lack demonstration. Primary nonattainment areas which require but lack demonstrations should already be subject to special progress requirements of case-by-case SIP revision bubbles.

under these rules may create or accentuate plan deficiencies which may have to be corrected at a later date or compensated by other means. Where states fail to remedy deficiencies identified in the notice within the prescribed period, EPA may either rescind its previous approval of the rule, or issue a notice of SIP deficiency under section 110(a)(2)(H) of the Act.

F. Public Comment

For emissions trades processed under generic rules, existing state statutes or regulations will generally provide for adequate public notice and opportunity to comment, including opportunity for judicial review sufficient to make comment effective. Under such statutes or regulations, after the state has reviewed a bubble application submitted pursuant to an approved generic rule, a newspaper or similar notice is typically published providing a comment period (usually thirty (30) days) on the proposed decision to approve or disapprove the application. This notice generally informs the public that the proposed approval document (license, order, permit, consent agreement, etc.), the application itself (with the exception of any portion entitled to confidentiality under state or federal law[77], and the technical analysis performed by the state in making its proposed determination, are available for review at specified times and locations. The notice also offers the opportunity for a public hearing.

Under today's policy, the state must also notify the relevant Federal Land Manager if an emissions trade will take place within 100 kilometers of a PSD Class I area. Notification must occur early enough in the review process to allow at least 30 days for the submittal of comments before the trade will be approved by the state.

Where adequate procedures for public notice and comment are not already provided in existing state statutes or regulations, such procedures must be provided as part of an EPA-approved generic rules. In all proposed and final generic bubble actions, states must clearly and publicly identify both the pre- and post-trade actual and allowable emissions of each source involved in the trade, so that the ambient effects of each bubble may be known.

To ensure adequate public awareness consistent with § 304 of the Clean Air Act, state generic rules or other existing state laws or regulations must also make publicly available any changes to accomplished under a generic rule may nevertheless be approved as case-by-case SIP revisions. Through this SIP revision process, states and sources may also demonstrate that a general principle discussed in Section I above does not apply to their particular circumstances, or that such a principle may be satisfied in other ways.

EPA will make reasonable efforts to take prompt action on SIP trading proposals after a state has ruled on an individual application and submitted it to the Agency. EPA encourages "parallel processing" of such proposals, with EPA and state officials conducting concurrent review so that both agencies can give public notice of proposed action at roughly the same time. EPA can then take final action after the state completes its proceedings, provided the state does not substantially alter the proposal after public notice. EPA will also publish noncontroversial SIP revisions as direct final actions, converting them to proposals only if requests to submit adverse comments are received within 30 days (see generally 46 FR 44477, September 4, 1981). In all bubble actions EPA will clearly identify (or require states to identify, as appropriate) both pre- and post-trade actual and allowable emissions for each source involved in the trade, so that the ambient effects of each bubble may be known.

Appendix A—Regional EPA Emissions Trading Coordinators

Region I. David Conroy (APS-2310), State Air Programs Branch, U.S. Environmental Protection Agency, Region I, John F. Kennedy Federal Building, Boston, Massachusetts 02203, (617) 565-3252; FTS 835-3252

Region II: Betty Martinovich, Air Branch, U.S. Environmental Protection Agency, Region II, 26 Federal Plaza, New York, New York 10007, (212) 264-2517; FTS 264-2517

Region III: Cynthia Stahl, Air Programs Branch, U.S. Environmental Protection Agency, Region III, 841 Chestnut Building, Philadelphia, Pennsylvania 19101, (215) 597-9337; FTS 597-9337

Region IV: Melvin Russell, Air Programs Branch, U.S. Environmental Protection Agency, Region IV, 345 Courtland Street, N.E., Atlanta, Georgia 30308, (404) 257-2864; FTS 257-2864

Region V: Joe Paisie, Air Compliance Branch, U.S. Environmental Protection Agency, Region V, 230 South Dearborn Street, Chicago, Illinois 60604, (312) 886-5777; FTS 886-5777

Region VI: Bill Riddle, Air Program Branch, U.S. Environmental Protections Agency, Region VI, First

[77] The specific pollutants emitted by the source, the amount of those pollutants, and their ambient air impact may not be deemed confidential.

International Building, 1201 Elm Street, Dallas, Texas 75270, (214) 767-9870; FTS 729-9870

Region VII: Charles Whitmore, Air Support Branch, U.S. Environmental Protection Agency, Region VII, 324 East 11th Street, Kansas City, Missouri 64106, (913) 236-2896; FTS 757-2896

Region VIII: Dale Wells, Air Programs Branch, U.S. Environmental Protection Agency, Region VIII, 1860 Lincoln Street, Denver, Colorado 80296, (303) 293-1773; FTS 564-1773

Region IX: Nancy Harney, Air Management Division, U.S. Environmental Protection Agency, Region IX, 215 Fremont Street, San Francisco, California 94105, (415) 974-7658; FTS 454-7658

Region X: David Bray, Air Programs Branch, U.S. Environmental Protection Agency, Region X, 1200 6th Avenue, Seattle, Washington 98101, (206) 442-4253; FTS 399-4253

Appendix B—Definitions of "Actual," "Allowable" and "Baseline" Emissions for Purposes of Emissions Trading

As used in this document with respect to bubbles, a source's "actual" emissions equal its average historical emissions, in tons per year, for the two-year period preceding the source's application to bank or trade emission reduction credit. Another time period may be deemed more representative of typical operations, but the applicant or state must show that actual emissions of such other period are consistent with air quality planning for the area. The definition of "actual emissions" for new source review purposes is somewhat different.[1] See 45 FR 52745 (August 7, 1980); 40 CFR 51.18(j)(1)(xii), 51.24(b)(21), 52.21(b)(21) and 52.24(f)(13).

A sources's "allowable" emissions in tons per year are calculated using the maximum rated capacity of the source (unless the source is subject to federally enforceable operating restrictions) and the most stringent of: (a) A standard applicable under 40 CFR Parts 60 or 61; (b) any applicable SIP emissions limitation, including those with a future compliance date; or (c) an emissions rate set in a federally enforceable permit condition. See 40 CFR 51.18 (j)(1)(xi), 51.24(b)(16), 51.21(b)(16) and 52.24(f)(11). The same definition of "allowable emissions" appears at each of these citations. See also 45 FR 52745 (August 7, 1980).

For bubbles, a source's "baseline" emissions are equal to the product of its (1) *emission rate* ("ER"), specified in terms of mass emission per unit of production or throughput (e.g., pounds SO_2 per million BTU or pounds of VOC per weight of solids applied); (2) *average hourly capacity utilization* ("CU") (e.g., millions of BTU per hour or weight of solids applied per hour); and (3) *number of hours of operation* ("H") during the relevant time period. I.e., baseline emissions = ER x CU x H. Net baseline emissions for a bubble are the sum of the baseline emissions of all sources involved in the trade.

In attainment areas and nonattainment areas with approved demonstrations of attainment, a source's baseline emissions for bubble purposes must generally be determined using the lower of "actual" or "allowable" values for each of the three baseline factors. Actual values for these factors are determined based on the source's average historical values for the factors for the two-year period preceding the source's application to bank or trade emission reduction credits. As discussed above, another time period may be deemed more representative of typical operations, but the emissions for that other period must be shown to be consistent with air quality planning for the area. A source's allowable values for the three baseline factors are determined based on its lowest federally enforceable limit for those factors (i.e., the lowest limit specified in an applicable SIP, PSD or other NSR permit issued under an EPA-approved program, compliance order, or consent decree), including those with a future compliance date.

The actual values for any of the three baseline factors, when higher than corresponding allowable values, may not be used by a source in calculating baseline emissions (i.e., reductions down to compliance levels cannot qualify for emission reduction credit). The allowable values for one or more of these factors, when higher than the corresponding actual values, may be used in calculating bubble baseline emissions for a source only in the following circumstances:

- Where, in a nonattainment or attainment area with an approved demonstration, the applicant shows that the demonstration assumes allowable value(s) for the factor(s) in question. Such a showing must be based on written evidence.
- Where, in an attainment area, the approved demonstration does not assume allowable value(s) for the baseline factor(s) in question, but the applicant performs satisfactory ambient tests to show that the use of such allowable value(s) will not jeopardize attainment and maintenance of NAAQS, PSD increments or visibility. For particulate matter or SO_2, this will require at least a Level II modeling analysis using actual emissions for the pre-trade case.[2] Where such an analysis is submitted to justify allowable values for a case-by-case SIP revision bubble, the Region may require additional technical support if deemed necessary to protect applicable standards or increments. See Section I.B.1.b above.
- Where, in a non-attainment area with an approved demonstration of attainment, the demonstration does not assume allowable value(s) for the baseline factor(s) in question, but the applicant demonstrates through a Level III modeling analysis that the use of such allowable value(s) will not jeopardize attainment and maintenance of NAAQS or PSD increments.
- Where, in an attainment area or a nonattainment area with an approved demonstration, a source has a new source preconstruction permit issued after the PSD baseline date or the base year of the attainment demonstration. In such cases, the applicant may use the value(s) of ER, CU and H upon which the new source permit was approved.

While the Emissions Trading Policy does permit sources to use allowable values for ER, CU and H in determining baseline emissions for bubbles under certain carefully prescribed conditions, the approach taken recognizes that SIP demonstrations are frequently based on a "hybrid" of allowable and actual values, and that bubble baselines in these areas must accurately reflect SIP assumptions for all three baseline factors, or be justified by appropriate modeling, to maintain SIP integrity.

In nonattainment areas needing but lacking approved demonstrations of attainment, sources involved in a bubble must use "lowest-of-actual-SIP-allowable-or-RACT-allowable" emissions baselines. The ER factor for such baselines is based on the actual emission rate, the SIP or other federally enforceable emission limit, or a RACT emission limit, whichever is lower, as of the time of the source's applicable to bank or trade, whichever is earlier. The CU and H factors for such baselines are based on the lower of actual or

[1] For instance, the calculation of actual emissions for netting purposes is as of the date of the event that brings about the reduction.

[2] Where the PSD baseline has been triggered, and such emissions data is available, the pre-bubble situation for sources which were in existence or commenced construction prior to the PSD baseline date should be modeled using emissions consistent with the PSD baseline concentration as defined in 40 CFR 51.24(b)(13) and 52.21(b)(13). However, emissions and associated parameters may be based on more recent values where past emissions data cannot readily be obtained. For modeling principles see section I.A.1.c.(1) above.

allowable values for those factors. Actual values for CU and H must be determined using the source's average historical values for the two year period preceding the source's application to bank or trade, unless another two year period is shown to be more representative of typical operations.

For sources which banked or sought to bank credit in these nonattainment areas prior to publication of today's notice, the "date of application to bank" is the date of written application to the state to bank credit through a formal bank or informal banking mechanism for use in future trades. For sources which seek to bank credit in these areas following publication of today's notice, the date of application to bank will be the date of written application to the state to *make a reduction state-enforceable* through or concurrent with use of a formal bank or informal banking mechanism.

Appendix C—Approvable Modeling Approaches

U.S. Environmental Protection Agency

Office of Air, Noise, and Radiation

February 17, 1983.

Memorandum

Subject: Emissions Trading Policy—Technical Clarifications

From: Sheldon Meyers, Director, Office of Air Quality Planning and Standards (ANR-443)

To: Director, Air and Waste Management Division, Regions II-IV, VI-VIII, X; Director, Air Management Division, Regions I, V, IX

The proposed emission trading policy was published on April 7, 1982, in the Federal Register. During the initial implementation of the proposal, numerous emissions trading issues have arisen including several ralating to the technical requirements of dispersion modeling and control strategy evaluations. To address these modeling issues, a special workshop was held to solicit recomendations from Regional meteorologists/modelers as well as the various Headquarters technical staff. The Standing Committee on Emissions Trading has also considered these issues and the recommendations of the workshop group.

This memo is intended to outline the results of these meetings and to provide interim guidance. It is effective immediately and will be incorporated into the final Agency policy when promulgated. The following revisions or clarifications on modeling for TSP, CO, and SO_2, are intended to supplement the criteria included in the April 7, 1982, emissions trading policy statement.

Level I Analysis

- To ensure air quality equivalence under Level I analysis (modeling is not required), trades cannot be approved where complex terrain (terrain greater than any stack with increasing emissions) is within the area of significant impact of the source or 50 kilometers, whichever is less.
- Stacks with increasing emissions must be at least good engineering practice (GEP) to prevent downwash.
- Fugitive process and stack sources can be traded under Level I (i.e., process for process, process for stack, and stack for stack) as long as the maximum distance between any emitting points is less than 250 meters. (This is true for trades under generic rules as well as for trades implemented by SIP revisions. The effective stack height requirement in the April policy remains.)
- Since trades involving open dust sources are very difficult to address in a replicable manner, they cannot currently be approved under generic Level I bubble regulations. (Reiteration of April 7, 1982 proposed policy.)

Level II Modeling Analysis

- In order to satisfy the basic requirement of the emissions trading policy that trades "must demonstrate ambient equivalence," the maximum change in air quality impact (delta) must be determined when performing a Level II anaylsis. Experience has shown that this requirement is not necessarily met where the April 7 policy says to analyze only the "impact at the receptor of maximum predicted impact after the trade." Therefore, to assure that no degradation of air quality greater than the significance levels would occur at any site, the method of finding the maximum deltas must be determined on both a spatially and temporally consistent basis. This menas that you look at each receptor point and determine the change in concentration from the before trade case to the after trade case sequentially for each time period within a full year of meteorological data (time period means the appropriate ambient standard averaging time; e.g., 3-hour, 24-hour, etc.). This appears the most reasonable method of determining ambient equivalence at this time.

Other techniques may be approved where they can be demonstrated to be equally protective of the standards and PSD increments. Also, a Level III analysis may be used to supplement those cases where Level II analysis shows a few receptors registering deltas greater than the significance values. This limited Level III anaysis would involve only the geographical area containing the high deltas and would include all contributing sources to that area.

- Use of refined models (e.g., MPTER, ISC) with at least one year of meteorological data is acceptable for a Level II analysis.
- To ensure replicability, only trades involving process fugitive emission sources vented through stacks can be approved in generic Level II rules unless the State rule specifically identifies actual facilities between which process fugitive trades would be permitted. In such cases, the State rule must specify the emission points and all associated and pertinent parameters needed to ensure replicability of modeling results.
- Since trades involving open dust sources are very difficult to address in a replicable manner, they cannot currently be approved under generic Level II bubble regulations. (Reiteration of April 7, 1982 proposed policy.)
- Trades involving complex terrain cannot be approved under Level II generic rules; however, approval of such trades through individual SIP reviews are possible under Level II. EPA's experience in processing bubbles for such sources has shown that they are exceedingly difficult to address in a replicable manner. They require a considerable number of judgments and negotiations among Agency personnel concerning the models, data bases, and proper source characterization.
- All national ambient air quality standards (NAAQS) averaging periods, not just the 24-hour, must be considered when performing the air quality equivalence analysis. This is necessary to assure trades approved under Level II will not have any adverse health and welfare impacts. Therefore, all Level II analyses must test the delta for each receptor site against the following significance levels: TSP—10 $\mu g/m^3$ (24-hour), 5 $\mu g/m^3$ (annual); SO_2—13 $\mu g/m^3$ (24-hour), 46 $\mu g/m^3$ (3-hour), 3 $\mu g/m^3$ (annual); CO—575 $\mu g/m^3$ (8-hour) 2300 $\mu g/m^3$ (1-hour).

Implementation of Changes

Implementation of these changes by the Regional Offices in their negotiations with States and individual sources should begin immediately. If there are any on-going bubble activities where the Regions or States and sources have reached firm agreements which do not comport with these changes, please alert Tom Helms (FTS 629-5526) of my staff. Consideration will be given to situations where the source or State has

already invested significant resources in a good-faith analysis based on prior methods of demonstrating ambient equivalence. If you have specific questions regarding implementation of these policy changes, please call Tom Helms.

cc: Chief, Air Branch, Regions I–X, Meteorologist, Regions I–X, Mike Levin, Joe Tikvart, Darryl Tyler

Appendix D—Approvable Averaging Times for VOC Trades

U.S. Environmental Protection Agency

Office of Air Quality Planning and Standards, Research Triangle Park, North Carolina 27711

January 20, 1984.

Memorandum

Subject: Averaging Times for Compliance With VOC Emission Limits—SIP Revision Policy

From: John R. O'Connor, Acting Director, Office of Air Quality Planning and Standards (MD–10)

To: Director, Air and Waste Management Division, Regions II–IV, VI–VIII, X, Director, Air Management Division, Regions I, V, IX.

The purpose of this memorandum is to clarify the Agency's policy regarding emission time averaging for existing sources of volatile organic compounds (VOC's). Numerous State implementation Plan (SIP) revisions, both broad regulations and source-specific changes, have been submitted which provide for compliance determinations by "time averaging" emissions of VOC for periods exceeding 24 hours. These requests and the following policy on this subject were discussed extensively at a recent meeting attended by those Regional Offices which have the most pending actions (Regions I, III, IV, V); the Office of Air Quality Planning and Standards; and the Office of General Counsel. This policy represents the consensus of the meeting attendees.

The objective of EPA's national VOC emissions control program is the timely attainment and maintenance of the national ambient air quality standard (NAAQS) for ozone. SIP revisions and other regulatory actions relating to VOC control must maintain the integrity of this basic objective. There should be assurances that VOC emission control is reasonably consistent with protecting this short-term ozone standard. Further, ice SIP's and associated VOC control ..ograms comtemplate the actual application of reasonably available control technology (RACT), regulatory actions that incorporate longer term averages to circumvent the installation of overall RACT level controls cannot be allowed.

Current Agency guidance specifies the use of a daily weighted average for VOC regulations as the preferred alternative where continuous compliance is not feasible. An example might be where a facility operates in a batch manner with multiple lines and various products. Reference is made to the December 8, 1980, Federal Register (copy attached) where can coating operators are allowed to "bubble" several production lines and average emissions over a 24-hour time period.

The preferred daily weighted average alternative may not be feasible in all cases. Where the source operations are such that daily VOC emissions cannot be determined or where the application of RACT for each emission point (line, machine, etc.) is not economically or technically feasible on a daily basis, longer averaging times can be permitted under certain conditions. In determining feasibility, consideration might be given, for example, to the extent to which modifications can be made to testing, inventory, or recordkeeping practices in order to quantify daily emissions. Also, variability or lack of predictability in a source's daily operation might be considered as well as availability of control technology or the physical impediment or restriction to control equipment installation. In order to allow longer than daily averaging in SIP regulations, the following conditions or principles must be honored:

1. Real reductions in actual emissions must be achieved, consistent with the RACT control levels specified in SIP's or the control technique guidelines (CTG's). These limits are typically expressed in terms of VOC per unit of production (a qualitative term such as lbs VOC/gal coating). Where it is not feasible to specify emission limits in such terms, emission limits per unit of time can be approved provided that:

a. The emission limits reflect typical (rather than potential or allowable) production rate and operating hours. These emission limits must truly reflect emissions reductions consistent with RACT and are not simply an artificial constraint on potential emissions. This must be supported in the SIP revision by historical production and operation data.

b. Nonproduction or equipment downtime credits are not allowed in the emission limit calculation unless a Federally enforceable document specifically restricts operation during these times. Such credit must be based on real, historical emissions.

2. Averaging periods must be as short as practicable and in no case longer than 30 days.

3. A demonstration must be made that the use of long-term averaging (greater than 24-hour averaging) will not jeopardize either ambient standards attainment or the reasonable further progress (RFP) plan for the area. This must be accomplished by showing that the maximum *daily* increase in emissions associated with long-term averaging is consistent with the approved ozone SIP for the area.

4. Sources in areas lacking approved SIP's, or in areas with approved SIP's but showing measured violations, cannot be considered for longer term averages until the SIP has been revised demonstrating ambient standards attainment and maintenance of RFP (reflecting the maximum daily emissions from the source with long-term averaging).

Meaningful short-term (i.e., daily) emission caps are desirable especially for sources subject to large fluctuations in emissions. The use of a daily cap (equal to or less than current average emissions on a daily basis) that limits short-term emissions to RACT equivalent levels would meet the above objective of ensuring VOC control that is consistent with attaining the NAAQS for ozone.

States have the primary responsibility to show adherence to the above principles and, to do so, must include the following information (in detail) in all SIP revision requests that seek VOC averaging times greater than 24 hours:

1. The VOC limits specified in an enforceable form with appropriate compliance dates.

2. A description of the affected processes and associated historical production and operating rates.

3. A description of the control techniques to be applied to the affected processes such as low solvent and waterborne coating technology and/or add-on controls.

4. The nature of the emission control program whether a bubble, a regulation change, a compliance schedule, or some other form of alternative control program.

5. The method of recordkeeping and reporting to be employed to demonstrate compliance with the new emission limit requirement and to support the showing that the emission limit is consistent with RFP and the demonstration of attainment.

Each EPA Regional Office shall have

Misty

OhioEPA

State of Ohio Environmental Protection Agency

INTER-OFFICE COMMUNICATION

TO: District Office Air Unit Supervisors and Local Air Agency Directors

FROM: Jim Orlemann, Manager, Engineering Section, DAPC

SUBJECT: OAC rule 3745-21-07(G)(2)

DATE: April 9, 1993

On 12/4/92, we sent to each of you a questionnaire concerning the application of OAC rule 3745-21-07(G)(2) to coating operations. As a result of this survey, it is apparent that some guidance concerning the application of this rule is necessary. The following outlines, in general, how this rule should be applied to coating operations **that do not employ control equipment:**

1. If all or a portion of the coatings employed in an operation are photochemically reactive materials(PRMs), and these PRMs are generally employed each day of operation, then the total **organic material** emissions shall not exceed 8 lbs/hr or 40 lbs/day **at any time**. Please note that these emission limits would apply to **all** of the organic material emissions and **not just to the PRM emissions.**

2. In some cases, the PRMs may be employed infrequently, e.g., on just one day per week. In these cases, it would be acceptable to apply the emission limits only on those days when the PRMs are employed. As stated above, however, on those days the emission limits would apply to all of the organic material emissions, even if only a small portion of the coating materials used that day are PRMs.

3. For significant coating operations that fall into the scenario described in (1) above, and which do not employ control equipment, the following **daily** records should be maintained by the owner/operator:

the company identification for each coating and cleanup material employed;
documentation on whether or not each cleanup material is a photochemically reactive material (PRM);
the number of gallons of each coating and cleanup material employed;
the organic compound content of each coating and cleanup material, in pounds per gallon;
the organic compound emission rate for each coating

and cleanup material, in pounds per day;

(f) the total organic compound emission rate for all coatings and cleanup materials, in pounds per day;
the organic compound emission rate for each coating and cleanup material, in pounds per hour for each hour of the day; and
the total organic compound emission rate for all coatings and cleanup materials, in pounds per hour for each hour of the day.

[**Note:** The coating information required in (c) through (h) must be for the coatings **as employed**, including any thinning solvents added at the coating line. Also, the cleanup material information required in (c) through (h) is only for those cleanup materials that are determined to be PRMs.]

This recordkeeping requirement assumes it is technically and economically reasonable for the entity to monitor and record the **hourly** usage of the coatings and cleanup materials. In many cases, it may not be reasonable. In cases where an entity can demonstrate that it is not reasonable, the following two subparagraphs may be used in place of (g) and (h) above:

(g) the total number of hours the coatings and cleanup materials were employed in the operation; and
(h) (f)/(g), in pounds per hour (average).

The use of these two subparagraphs will give an **average** hourly emission rate for the day; however, as long as this value remains well below the allowable of 8 lbs/hr (maximum), we can assume that compliance is being maintained.

The owner/operator also should be required to submit semiannual or quarterly summaries which include the following information:

(a) the total organic compound emission rate for all coatings and cleanup materials employed during the reporting period;
(b) <u>either</u>: an identification of each hour during which the organic compound emission rate exceeded 8 lbs/hr, and the actual organic compound emission rate during each such hour;
<u>or</u>: an identification of each day during which the average hourly organic compound emission rate exceeded 8 lbs/hr, and the actual average hourly organic compound emission rate for each such day;
(c) an identification of each day during which the organic compound emission rate exceeded 40 lbs/day, and the actual organic compound emission rate for each such day; and
(d) a description of any corrective actions taken to

address the exceedances identified in (b) and/or (c).

4. For significant coating operations that fall into the scenario described in (2) above, and which do not employ control equipment, the following daily records should be maintained by the owner/operator:

(a) same as (3)(a)
(b) documentation on whether or not each coating and cleanup material is a photochemically reactive material (PRM);
(c) same as (3)(c)
(d) same as (3)(d)
(e) for each day during which a PRM is employed, the organic compound emission rate for each coating and cleanup material, in pounds per day;
(f) for each day during which a PRM is employed, the total organic compound emission rate for all coatings and cleanup materials, in pounds per day;
(g) for each day during which a PRM is employed, the organic compound emission rate for each coating and cleanup material, in pounds per hour for each hour of the day;
(h) for each day during which a PRM is employed, the total organic compound emission rate for all coatings and cleanup materials, in pounds per hour for each hour of the day; and
(i) the total organic compound emission rate for **all** coatings and cleanup materials, in pounds per month.

[**Note:** The coating information required in (c) through (h) must be for the coatings **as employed**, including any thinning solvents added at the coating line. Also, the cleanup material information required in (c) through (h) is only for those cleanup materials that are determined to be PRMs.]

As explained in (3) above, if an entity can demonstrate that it is not reasonable to maintain hourly records of the usage of coatings and cleanup materials, the following two subparagraphs may be used in place of (g) and (h) above:

for each day during which a PRM is employed, the total number of hours the coatings and cleanup materials were employed in the operation; and (f)/(g), in pounds per hour (average).

The owner/operator also should be required to submit semiannual or quarterly summaries which include the following information:

(a) the total organic compound emission rate for **all** coatings and cleanup materials employed during the reporting period;

(b) <u>either</u>: for the days during which a PRM was employed, an identification of each hour during which the organic compound emission rate exceeded 8 lbs/hr, and the actual organic compound emission rate during each such hour;

<u>or</u>: for the days during which a PRM was employed, an identification of each day during which the average hourly organic compound emission rate exceeded 8 lbs/hr, and the actual average hourly organic compound emission rate for each such day;

(c) for the days during which a PRM was employed, an identification of each day during which the organic compound emission rate exceeded 40 lbs/day, and the actual organic compound emission rate for each such day; and

(d) a description of any corrective actions taken to address the exceedances identified in (b) and/or (c).

For the purpose of determining what is a significant coating operation, we recommend that if an operation has actual organic compound emissions greater than 5 tons/year, it should be considered to be a significant operation.

Thanks for your input on the questionnaire! If you have any questions concerning this guidance, please give me a call at 614-644-3592. If necessary, we will expand this guidance to make it clearer.

<u>Distribution list</u>: Don Cavote, CDO
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xc: Tom Kalman
Bruce Weinberg
Bill Juris
Bob Hodanbosi
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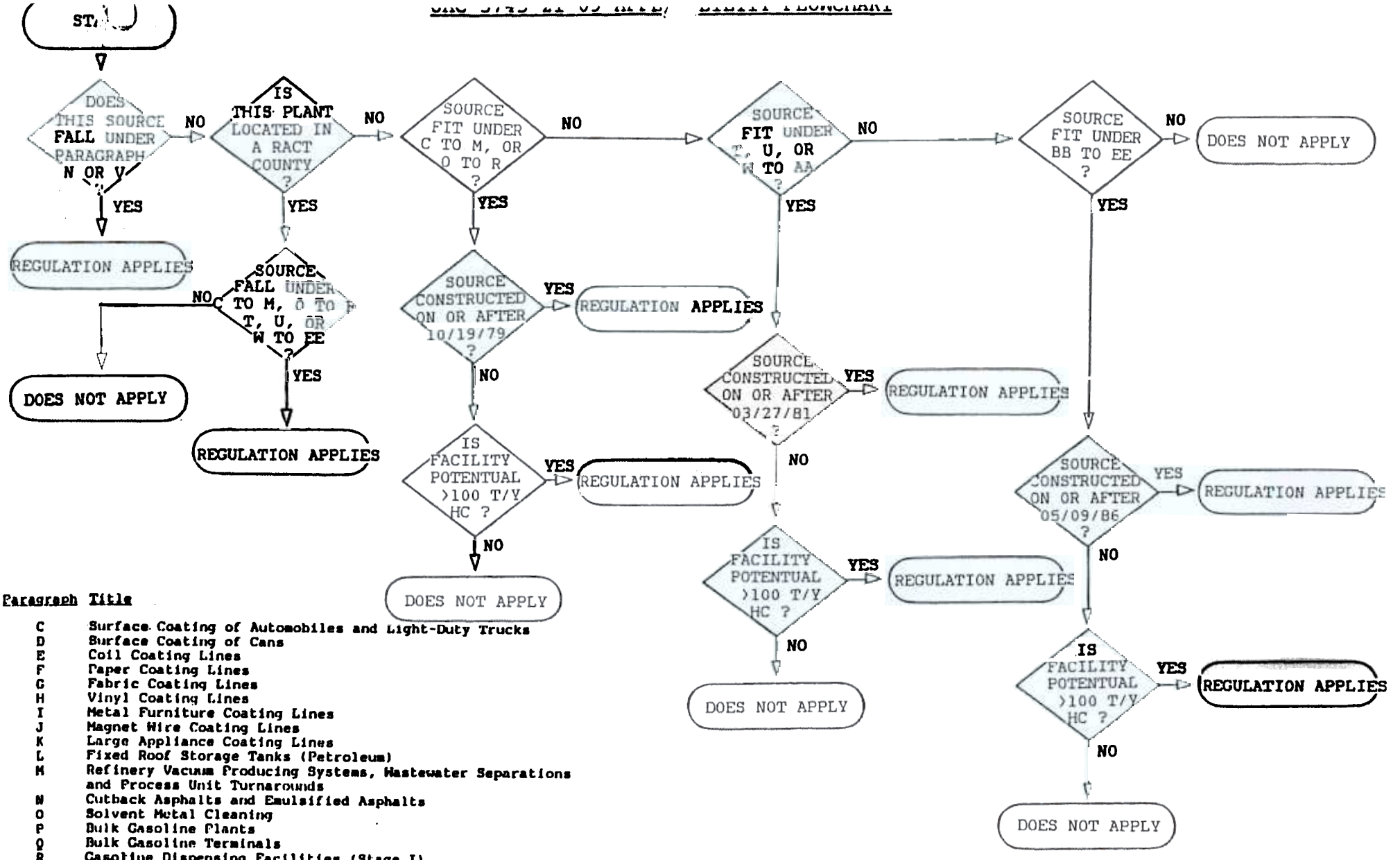
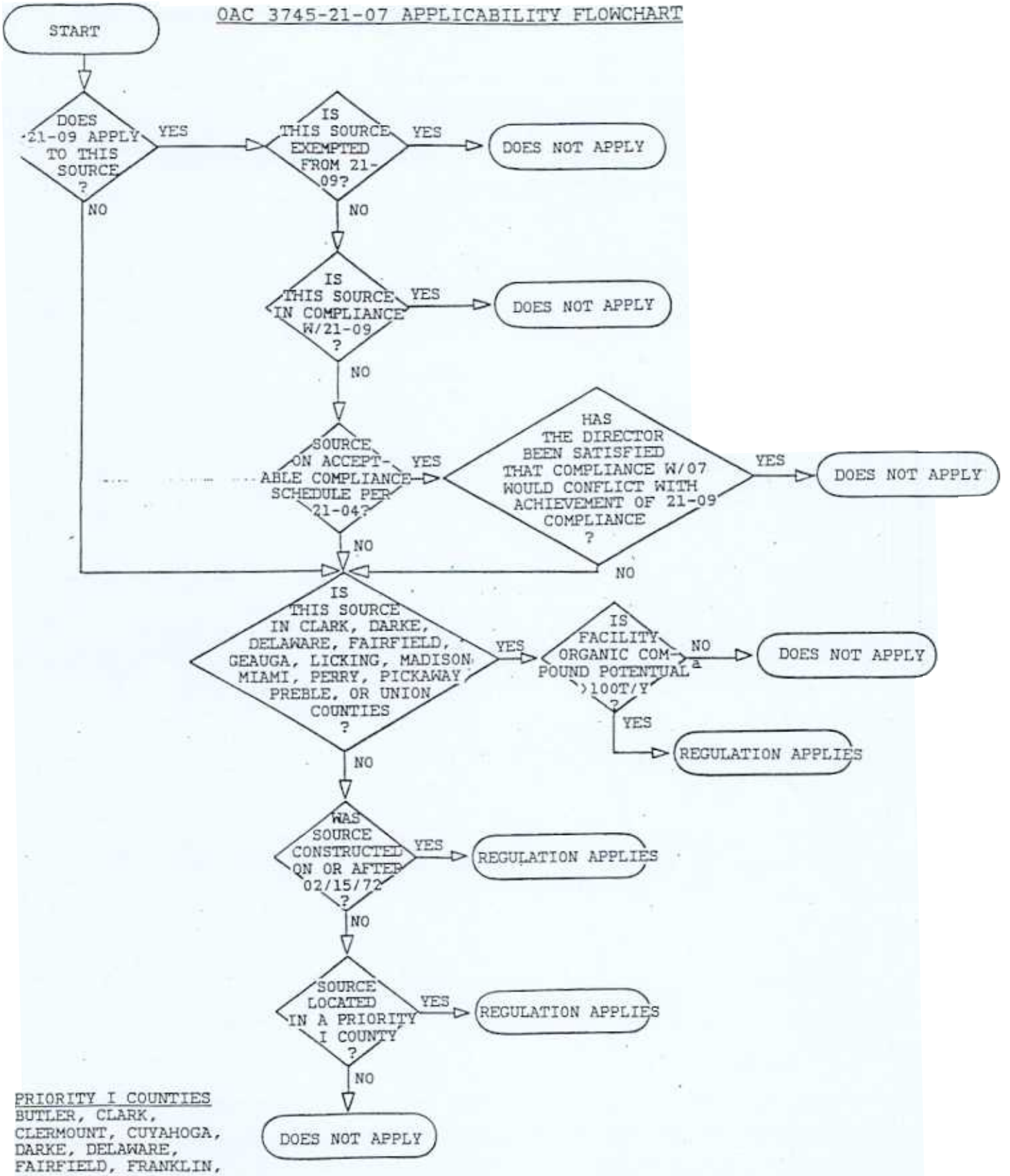


Paragraph	Title
C	Surface Coating of Automobiles and Light-Duty Trucks
D	Surface Coating of Cans
E	Coil Coating Lines
F	Paper Coating Lines
G	Fabric Coating Lines
H	Vinyl Coating Lines
I	Metal Furniture Coating Lines
J	Magnet Wire Coating Lines
K	Large Appliance Coating Lines
L	Fixed Roof Storage Tanks (Petroleum)
M	Refinery Vacuum Producing Systems, Wastewater Separations and Process Unit Turnarounds
N	Cutback Asphalts and Emulsified Asphalts
O	Solvent Metal Cleaning
P	Bulk Gasoline Plants
Q	Bulk Gasoline Terminals
R	Gasoline Dispensing Facilities (Stage I)
S	"Alside, Ink" Siding Coating Line and Corner Coating Line
T	Leaks From Petroleum Refinery Equipment
U	Miscellaneous Metal Parts and Products Coating Lines
V	Gasoline Tank Trucks
W	Synthesized Pharmaceutical Manufacturing
X	Rubber Tire Manufacturing
Y	Flexographic, Packaging Rotogravure and Publication Rotogravure Printing Lines
Z	External Floating Roof Tanks (Petroleum)
AA	Perchloroethylene Dry Cleaning Facilities
BB	Petroleum Dry Cleaning Facilities
CC	Continuous, Polystyrene Resin Manufacturing
DD	Leak- from Process Units that Produce Organic Chemicals
EE	N dations Processes that Produce Organic Chemicals

RACT COUNTIES

BUTLER, CLERMONT, CUYAHOGA, FRANKLIN, GREEN, HAMILTON, LAKE, LORAIN, LUCUS, MOHONING, MEDINA, MONTGOMERY, PORTAGE, STARK, SUMMIT, TRUMBULL, WARREN, AND WOOD.

OAC 3745-21-07 APPLICABILITY FLOWCHART



PRIORITY I COUNTIES
BUTLER, CLARK, CLERMOUNT, CUYAHOGA, DARKE, DELAWARE, FAIRFIELD, FRANKLIN, GEAUGA, GREEN, HAMILTON, LAKE, LICKING, LORAIN, LUCUS, MADISON, MEDINA, MIAMI, MOTGOMERY, PERRY, PICKAWAY, PORTAGE, PREBLE, STARK, SUMMIT, UNION, WARREN, AND WOOD.

a "POTENTUAL TO EMIT" MEANS THE MAXIMUM ACTUAL EMISSIONS BASED ON MAXIMUM CAPACITY WITH CONTROL EQUIPMENT.

AN EXPLANATION OF OHIO AIR POLLUTION HYDROCARBON REGULATIONS

AP-5-06 to AP-5-08
Covering Hydrocarbons and Photochemical Oxidants

Comments of the Ad-Hoc Committee
of the National Paint and Coatings Association

Presented by: James R Blegen
Technical Coordinator
Resins and Plastics Division
Ashland Chemical Company

June 29, 1972

Culminating many years of work, the Federal Environmental Protection Agency has taken the first major step this year to systematically provide for a nationwide air pollution abatement program.

The Federal government established in 1971 standards of air quality which were a measure of protection for the health and welfare of our nation's population. Legislation required the states to prepare implementation plans to meet these national air-quality standards when they were exceeded. These plans had to be submitted by January 31, 1972.

The objective of these plans was to control five sets of air contaminants: particulates (dust), carbon monoxide, sulfur, NOx and photochemical oxidants (hydrocarbons).

Of most concern to you is the latter category: hydrocarbons, (photo chemically reactive material). Ohio's implementation plan deals extensively with this subject. This discussion pertains to certain aspects of this regulation as they relate to the use of paints and coatings.

Only Priority I regions where measurement of photochemical oxidants exceeds 195 micrograms per cubic meter (0.10 ppm), 1 hour maximum are required to meet control of emission of organic materials. All existing sources in Cleveland and Columbus areas must comply with the regulation by 1975; Dayton, Toledo and Cincinnati regions must comply by 1977. New installations must meet control of emission of organic materials on completion of construction.

All owners or operators of existing sources must complete State of Ohio forms for permits and variances by August 15, 1972.

The intent of hydrocarbon control is to prevent formation of "smog." The chemistry of photochemical reaction creating smog is complex and its description is not the prime purpose of this presentation. It is important to emphasize that four major ingredients must be present to create photochemical smog: strong sunlight, NOx, ozone, and volatile photochemically reactive materials. While the incidence of the presence of photochemical smog is well documented in the Los Angeles Basin, its occurrence in other areas of our nation is sporadic. Smog is generally attributed to automobile exhausts and to a lesser extent the use of solvents, architectural coating, and hydrocarbon storage and handling.

Ohio's implementation plan, approved by the Federal Environmental Protection Agency, provided for strict control of hydrocarbons and is described in Regulation AP-5-06 to AP-5-08.

In an effort to clarify the regulations that apply to the use of paints and coatings, the Ad-Hoc Committee of the National Paint and Coatings Association, which is listed in the appendix, has made the following conclusions:

> The most far-reaching aspects under AP-5-07 fall under Section G: Section G (1) reads: "A person shall not discharge more than 15 pounds of organic materials into the atmosphere in any one day, nor more than 3 pounds in any one hour, from any article, machine, equipment, or other contrivance..... (Unit, etc).....in which any liquid organic material or substance containing liquid organic material comes into contact with flame or is based, heat-cured, or heat-polymerized, in the presence of oxygen, unless said discharge has been reduced by at least 85 percent."

The regulation covers operations utilizing any organic solvent where, during the process, flame comes into contact with solvent or solvent vapor, or where baking, heat curing, or heat polymerizing takes place. There is no organic solvent composition qualification for this category. The uncontrolled emission of organic material from each operation is limited to 15 pounds per 24 hour day -- or 3 pounds per any hour limit -- or 85 percent reduction.

Thus, typical baking alkyd, alkyd melamine, thermosetting acrylic systems, and the like come under tight control.

Thermosetting systems are not subject to the 15 pound limit prior to heating, however, provided they are cut in solvents which are considered to be "exempt" or non-photochemically reactive. The exempt or non-photochemically reactive products are determined by excluding the photochemically reactive materials listed under AP-5-01, Section (C), subparagraphs (1) through (3), also Section (D).

Since it is not feasible to put afterburner controls on spray booths or open conveyor lines because of the large volumes of air in the effluent, it becomes necessary to make a wholesale shift to "exempt" solvents or go to some other system that is excluded from control under the legislation.

It must be understood that the "exempt" or non-photochemically reactive solvents completely lose this exemption and go under the tight controls listed above once they go into an oven and are subjected to curing by heat.

What may not be completely clear is that if the solvent is exempt or non-photochemically reactive, there is no limitation on it, even if the solvent is evaporated at elevated temperatures, for example, 30 minutes at 300°F -- provided the resin system does not polymerize.

Therefore, thermoplastic noncuring polymers -- such as those used in vinyl, nitrocellulose acrylic and for other lacquers -- if dissolved in "exempt" solvent, for example, nonbranched ketones (ie: methyl ethyl ketone), alcohols, esters and/or certain aliphatic hydrocarbons with ranges of aromatics permitted -- have no limitations imposed.

The proof as to whether the system is noncuring or nonpolymerizing under the influence of heat -- and therefore exempt from limitation -- is whether the system will redissolve in the original solvent.

Under Section G, paragraph (2), the Regulation reads: "A person shall not discharge more than 40 pounds of organic material into the atomosphere in any one day, nor more than 8 pounds in any one hour, from any article, machine, equipment..... (unit, etc)..... used under the conditions other than described in subsection (G)(1) of this Regulation for employing, applying, evaporating or drying any photochemically reactive material or substance containing such photochemically reactive material, unless said discharge has been reduced by at least 85 percent."

In essence, if you don't bake or heat-polymerize, the limit is 40 pounds instead of 15 pounds even if you are using the photochemically reactive solvents. If you are using "exempt" solvents, as previously indicated, there is no limit.

Under Section G, paragraph (9), subparagraph (c), there is an exclusion saying "..... this regulation shall not apply to:..... (c) The use of any material..... if:

(i) the volatile content of such material consists only of water and liquid organic material, and
(ii) the liquid organic material comprises not more than 20 percent of said volatile content, and
(iii) the volatile content is not a photochemically reactive material."

What that says is that the conventional water based industrial systems are excluded from coverage even though they are baked and heat-polymerized, when the volatile solvent used in the water based system is "exempt."

A new provision is that in Section (G)(9), (d), which says that the above restrictions of 15 or 40 pounds per day or the greater restrictions per hour shall not apply if:

"(i) the volatile content of such material does not exceed 20 percent by volume of said material, and
(ii) the volatile content is not a photochemically reactive material."

In simple terms, what this says is that the Regulation does not apply to high solids coatings, namely which are 80 percent solids and not over 20 percent volatile providing the volatile is "exempt."

Some of the other exclusions are with reference to plasticizer volatility.

Architectural coatings are controlled to the 1 gallon size at the point of sale. Section (H)(1) on architectural coatings reads: "A person shall not sell or offer for sale for use in containers of greater than 1 gallon capacity, any architectural coating containing a photochemically reactive material." This simply says that architectural coatings sold in containers larger than 1 gallon should be in "exempt" solvents such as exempt mineral spirits. California and New York City make the cutoff point at 1 quart. It seems likely that most companies will simply convert to the use of "exempt" mineral spirits rather than segregate by size.

Under Section (H)(2), the use is likewise covered. The Regulation reads: "A person shall not employ, apply, evaporate, or dry any architectural coating, purchased in containers of greater than 1 gallon capacity, containing a photochemically reactive material."

Basically, Section (H)(3) prohibits the use of thinner other than "exempt" architectural type solvents, such as mineral spirits, by stating: "A person shall not thin or dilute for application any architectural coating with a photochemically reactive material."

Practically applying Section (H)(1) through (H)(3), it would seem the paint and architectural coating supplied in Ohio is Priority I region and must contain an "exempt" solvent such as exempt mineral spirits.

It should be understood that for air dry applications, essentially aliphatic hydrocarbons are permitted with certain reservations -- such as when the aromatic content of C8 and higher (except for ethyl benzene) does not exceed 8 percent by volume. We find that quite a number of people do not understand that ordinary mineral spirits is not acceptable under this Regulation when the aromatic content is above 8 percent by volume.

The definitions of photochemically reactive materials come under AP-5-01 and Section (C) reads as follows: " 'Photochemically reactive material' means

any liquid organic material with an aggregate of more than 20 percent of its total volume composed of the chemical compounds classified below or which exceeds any of the following individual percentage composition limitations, referred to the total volume of liquid:

(1) A combination of hydrocarbons, alcohols, aldehydes, esters, ethers, or ketones having an olefinic or cyclo-olefinic type of unsaturation: 5 percent; alkene

(2) A combination of aromatic hydrocarbons with eight or more carbon atoms to the molecule except ethyl benzene: 8 percent;

(3) A combination of ethyl benzene, ketones having branched hydrocarbon structures, trichloroethylene or toluene: 20 percent."

What this says is that up to 20 percent of toluene or trichloroethylene or methyl ethyl ketone or ethyl benzene singly may be used or in any combination of this group. With those which are limited to 8 percent and 5 percent limiting totals of each group are never exceeded. In other words, one cannot superimpose the 5, 8 and 20 percent limitations and total 33 percent. The total must not exceed the percent of the maximum individual group limitations.

The regulation notes: "Whenever any organic material or any constituent of an organic material may be classified from its chemical structure into more than one of the above groups of compounds, it shall be considered as a member of the most reactive group, that is, that group having the least allowable percent of the total volume of liquid.

Thus, a combination must not exceed each group total -- and the combinations must never exceed a 20 percent grand total. Any combination of the three groups in excess of 20 percent is regarded as photochemically reactive.

Some of the solvents which would be in the 5 percent by volume limitation are such things as olefins, dipentene, aldehydes and unsaturated ketones such as isophorone [redacted].

Typical of those products which are limited to 8 percent by volume are such aromatic hydrocarbons as xylene, tetralin, cumene and the aromatic 100 and 150 (Solvesso 100 and 150, Hi-Sol 10 and 15, etc.) type solvents.

In the 20 percent by volume limitation are such solvents as toluene, ethyl benzene, trichloroethylene, methyl isobutyl ketone and methyl isopropyl ketone. This list is not intended to be all inclusive but rather exemplary.

There is no limit in the use of saturated aliphatic hydrocarbon solvents which are classed as not being photochemically reactive when used in processes other than heat-curing or polymerization as applied to the coating.

SOME COMMONLY USED SOLVENTS IN THE COATINGS INDUSTRY BY CLASSIFICATION

I. SOLVENTS PERMITTED BY LIMITATION

A. Solvents limited to 5 percent by volume.

1. Olefins -- unsaturated hydrocarbons that are straight chain, branched or cyclic nonaromatic

   Examples:
   a. Ethylene, propylene or butene (not usually used as solvents)
   b. Butadiene (not used as a solvent)
   c. Terpene structures, including:
      Dipentene (also known as dl-limonene)
      Turpentine (a commercial mixture of terpenes)

2. Unsaturated ketones

   a. Isophorone
   b. Mesityl oxide

3. Unsaturated alcohols (none commonly used)

4. Unsaturated ethers

   a. Furan (not commonly used)

5. Unsaturated esters (none commonly used)

6. Aldehydes (NOT NECESSARILY TRUE, REG SAYS MUST BE SATURATED

   a. Furfural (also called furfuraldehyde)
   b. Most aldehydes as effluents from baking ovens are decomposition products of urea formaldehyde, melamine formaldehyde and phenol formaldehyde resins

B. Solvents limited to 8 percent by volume.

1. Aromatic hydrocarbons, C8 or higher except ethyl benzene

Examples:
a. Xylene (also called xylol)
b. Tetralin (1, 2, 3, 4 tetrahydronaphthalene)
c. Cumene (also called isopropyl benzene)
d. Aromatic 100 type solvents (approximately 100°F flash) (Examples: Solvesso 100, SC 100, Hi-Sol 10, etc)
e. Aromatic 150 type solvents (approximately 150°F flash) (Examples: Solvesso 150, SC 150, Hi-Sol 15, etc)

C. Solvents limited to 20 percent by volume. (Alone, or in combination with those on prior lists limited to 5 and 8 percent respectively.)

1. Aromatic hydrocarbons with fewer than 8 carbon atoms

a. Toluene (also called toluol)

2. Ethyl benzene

3. Trichloroethylene

4. Branch chain ketones

a. Methyl isobutyl ketone (MIBK)
b. Methyl isopropyl ketone
c. Ethyl amyl ketone (branched amyl group)
d. Pent-Oxone (tradename)
e. Isobutyl heptyl ketone
f. Diacetone alcohol (not a true alcohol)
g. Methyl isoamyl ketone (MIAK)

II. "EXEMPT" SOLVENTS -- NOT RESTRICTED PROVIDING RESINS WITH WHICH THEY ARE USED ARE NOT CURED (THERMOSET) TO INSOLUBILITY BY HEAT. (All solvent exemptions are lost under conditions of heat polymerization, etc. defined in the Law AP-5-07 (G)(1).)

A. Oxygenated solvents.

1. All saturated alcohols (by common name and other names, including tradenames)

	Common Name	Other Names (including tradenames)
a.	Methyl alcohol	Methanol
b.	Ethyl alcohol	Ethanol, denatured alcohol, Solox
c.	Isopropyl alcohol	Isopropanol
d.	Normal propyl alcohol	n-Propanol, 1-propanol
e.	Normal butyl alcohol	n-Butanol
f.	Isobutyl alcohol	Isobutanol
g.	Secondary butyl alcohol	Secondary butanol, 2-butanol
h.	Tertiary butyl alcohol	t-Butanol
i.	Normal amyl alcohol	1-Pentanol
j.	Primary amyl alcohol	2-Methyl-1-butanol
k.	Isoamyl alcohol	2-Methyl-1-butanol
l.	Methyl isobutyl carbinol	MIBC
m.	Hexyl alcohol	1-Hexanol or 2-methyl pentanol
n.	Hexadecyl alcohol	
o.	Cyclohexanol	Hexalin (tradename)
p.	2-Ethyl hexyl alcohol	2-Ethyl hexanol, isooctanol, isooctyl alcohol
q.	Texanol (tradename)	2, 2, 4-Trimethylpentandiol-1, 3 monoisobutyrate
r.	Isooctyl alcohol	
s.	Decyl alcohol	Decanol

2. Glycols -- dihydric alcohols (also called diols)

Common Name	Other Names (including tradenames)
Ethylene glycol	
Propylene glycol	1, 2-Propylene glycol
1, 3-Butylene glycol	1, 3-Butanediol
1, 4-Butylene glycol	1, 4-Butanediol
Diethylene glycol	
Dipropylene glycol	
Hexylene glycol	
2-Ethyl-1, 3-hexanediol	
Triethylene glycol	
Tripropylene glycol	

3. Glycol ethers -- or ether alcohols
(The name Cellosolve®, while a registered trademark of Union Carbide, is so widely used to generically describe a product structure that many chemists are unaware of the true chemical nature. For this reason, this is used frequently below as the common name.)

	Common Name	Other Names (including tradename
a.	Methyl Cellosolve	Ethylene glycol monomethyl ether 2-methoxyethanol, Dowanol EM, Ektasolv EM, methyloxitol
b.	Cellosolve	Ethylene glycol monoethyl ether or 2-ethoxyethanol, Dowanol EE, Ektasolv EE, oxital
c.	Butyl Cellosolve	Ethylene glycol monobutyl ether or 2-butoxyethanol, Dowanol EB, Ektasolv EB, butyloxital
d.	Isobutyl Cellosolve	Ethylene glycol monoisobutyl ether or isobutoxyethanol, Ektasolv EIB
e.	Propylene glycol mono-methyl ether	Dowanol PM, Polysolv PM
f.	Propasol B	n-Butoxypropanol, propylene glyc monobutyl ether
g.	Dipropylene glycol mono-methyl ether	Polysolv DPM
h.	Diethyl Carbitol®	Diethylene glycol diethyl ether
i.	Methyl Carbitol	Diethylene glycol monomethyl ethe Dowanol DM, methyl dioxital, Ekta solv DM, Polysolv DM
j.	Carbitol	Diethylene glycol monoethyl ether, dioxital, Polysolv DE, Dowanol DE
k.	Hexyl Cellosolve	Ethylene glycol monohexyl ether
l.	Ektasolv® DIB	Diethylene glycol monoisobutyl eth
m.	Polysolv® TM	Triethylene glycol monomethyl eth
n.	Butyl Carbitol	Diethylene glycol monobutyl ether, Dowanol DB, Ektasolv DB
o.	Polysolv PE	Triethylene glycol ethyl ether
p.	Polysolv TB	Triethylene glycol butyl ether
q.	Hexyl Carbitol	Diethylene glycol monohexyl ether

4. Saturated esters

	Common Names	Other Names (including tradenames
a.	Methyl acetate	
b.	Ethyl acetate	
c.	Isopropyl acetate	
d.	Normal propyl acetate	n-Propyl acetate
e.	Secondary butyl acetate	2-Butyl acetate
f.	Isobutyl acetate	
g.	Normal butyl acetate	n-Butyl acetate
h.	Amyl acetate	Pent-Acetate
i.	Primary amyl acetate	
j.	Methyl amyl acetate	
k.	Butyl lactate	
l.	Isobutyl isobutyrate	IBIB
m.	Cellosolve acetate	Ethylene glycol monoethyl ether acetate, Dowanol EEA, Ektasolv EE Acetate, Polysolv EE Acetate
n.	Butyl cellosolve acetate	Ethylene glycol monobutyl ether acetate, Ektasolv EB Acetate
o.	Ethylene glycol diacetate	Glycol diacetate
p.	2-Ethylhexyl acetate	
q.	Carbitol acetate	Diethylene glycol monoethyl ether acetate, Ektasolv DE Acetate
r.	Butyl carbitol acetate	Diethylene glycol monobutyl ether acetate, Ektasolv DV Acetate

5. Saturated nonbranch ketones

	Common Names	Other Names (including tradenames)
a.	Acetone	Dimethyl ketone
b.	Methyl ethyl ketone	MEK
c.	Methyl propyl ketone	
d.	Methyl normal butyl ketone	Methyl n-butyl ketone
e.	Ethyl butyl ketone	
f.	Methyl normal amyl ketone	Methyl n-amyl ketone
g.	Methyl normal heptyl ketone	
h.	Acetophenone	
i.	Cyclohexanone	

6. Nitroparaffins

   a. Nitromethane
   b. Nitroethane
   c. 2-Nitropropane
   d. 1-Nitropropane

7. Miscellaneous solvents

	Common Names	Other Names (including tradenames)
a.	Ethyl ether	
b.	Isopropyl ether	
c.	Dioxane	1, 4 Dioxane
d.	Monoethanolamine	
e.	Diethanolamine	
f.	Triethanolamine	
g.	Dimethyl ethanolamine	
h.	Aminomethylpropanol	1-Amino-2-methylpropanol and AMP
i.	Monoisopropanolamine	
j.	Diisopropanolamine	
k.	Triisopropanolamine	
l.	Tetrahydrofuran	THF
m.	Methylpyrrolidone	
n.	Dimethyl formamide	DMF
o.	Glycerine	

B. Hydrocarbons -- essentially aliphatic.

1. Mixed paraffinic and naphthenic -- normal or branched chains or cycloaliphatic (saturated)

   a. "Exempt" Mineral Spirits (i.e., less than 8% C8 or above aromatics except ethyl benzene
   b. Odorless Mineral Spirits (high paraffinic)
   c. "Exempt" aliphatic 140 type -- sometimes called high flash mineral spirits
   d. "Exempt" VM&P naphtha -- (varnish markers and painters naphtha)
   e. "Exempt" rubber solvent
   f. "Exempt" textile solvent
   g. Pentane
   h. Hexane
   i. Heptane
   j. Cyclohexane
   k. Naphthenes -- cycloaliphatic compounds (saturated) -- NOT to be confused with naphthalene and aromatic

2. Chlorinated -- all saturated

   a. Perchloroethylene

C. Hydrocarbons -- aromatic.

1. Unsubstituted -- less than 8 carbon

   a. Benzene

2. Chlorinated

   a. Monochlorobenzene
   b. Dichlorobenzene

A much more comprehensive solvent listing may be obtained by purchasing the Solvent Section of the Raw Materials Index from the National Paint & Coatings Association, though this is still not an absolutely complete list of all solvents used in the industry.

The Ohio Environmental Protection Agency

The Division of Air Pollution Control

AirLines

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March 13, 1992

Administration

Personnel

We continue to post and hire. We have filled a supervisor position in AQM&P; Paul Koval has replaced Tom Hadden. We will soon be filling five district positions; interviews are underway right now. An acid rain position, oxy fuels position, enforcement position and fiscal specialist are next. We continue to attract and hire many fine individuals. We also have a vacancy at the Air Lab. Mike Rath was promoted recently, and we will miss him and wish him well.

1991 Award Winners

It is with great pleasure that we announce the winners of this year's awards. They were given at the March 11th awards ceremony:

The PM_{10} SIP team was the winner of the "teamwork" award and they were honored by the Director. The team consists of Jim Orlemann, Tom Kalman, Bruce Weinberg, Amy Turner, Tammy Beets, Tom Tucker, Bill Spires, Bob Hodanbosi, Gary Engler, and Jeanne Mallett. The SIP has been declared "complete" by Region V and is under review. Way to go team! Congratulations!

The Special Performance Awards went to:

Amy Turner

Amy works for Tom Kalman and was rewarded for her expertise on PM_{10} and her hard work to complete the SIP in a timely manner. Congratulations Amy!

Sharon Korecko

Sharon was recognized for her hard work as Technical Services Word Processor and her work with other sections including engineering and permits. She is always willing to help out when extra work is needed. Congratulations Sharon!

John Martz

John was recognized for his outstanding work with Tom Winston and Jenny Tiell on the AIP or agreement in priniciple on the radiological monitoring project for federal facilities. John has put a great deal of time and effort into developing a new program of monitoring for the districts and locals. Congratulations John!

Employee of the Year-*Tammy Beets:*

Tammy was honored for her hard work as half time Engineering word processor and half time permit word processor. She splits her time between the two sections. Tammy did an exemplary job on the PM_{10} SIP and her friendly and helpful attitude has been greatly appreciated by all. Her work is high quality and prepared efficiently. Congratulations Tammy!

AIR QUALITY MODELING & PLANNING

Maximum Achievable Control Technology (MACT) Regulations

The U.S. EPA has proposed a National emission standards for Hazardous Air Pollutants (NESHAP) for source category: perchloroethylene (PCE, also known as tetrachloroethylene) emissions from dry cleaning facilities [FR/ Vol.56, No. 236/ Monday, 12/9/91 p.64382.] The authority to set these standards comes from section 112 (Title III) of the Clean Air Act Amendments of 1990 (CAAA) which directs the administrator to develop and publish a list of source categories. All new and existing sources falling into the dry cleaning facility source category are included under the proposed standard based on the amount of HAP emissions and because of their potential adverse effects to human health and the environment. The principal driving force behind the establishment of an industry standard is the MACT which in turn is based on demonstrated technology. Prior to the NESHAP proposal a thorough evaluation of air pollution prevention and control methods was conducted vis-a-vis technological feasibility, environmental impacts, and cost analysis. The CAAA permits the Administrator to develop regulatory standards that "distinguish among classes, types, and sizes of sources within a category or subcategory." In this particular NESHAP it has resulted in three regulatory alternatives:

Regulatory Alternative I would require a 95 percent control on a dry-to-dry machine and 85 percent control on a transfer machine through installation of a carbon adsorber and refrigerated condenser, respectively.

Regulatory Alternative II requires 95 percent control on a dry-to-dry machine via installation of either a carbon adsorber or refrigerated condenser, 95 percent control on either a new or previously uncontrolled existing transfer machine via installation of a carbon adsorber, and 85 percent control on an existing refrigerated condenser controlled machine.

Regulatory Alternative III is equivalent to MACT for major sources; requires 95 percent control of emissions on either a dry-to-dry machine (by installing a carbon adsorber or refrigerated condenser) or transfer machine (by installing a carbon adsorber).

The entire summary is attached.

New Source PTI Review

The Central Office New Source - PTI Review staff have received permit worksheets with terms and conditions allowing the use of waste oil for the control of fugitive dust on roadways and parking areas. It has been our position that the use of any type of waste oil for this purpose is not Best Available Technology (BAT). Please be aware of this when new source permit applications request to use waste oil for dust suppression and do not allow it in the PTI worksheets you prepare. If you have any new source review questions or concerns, please contact us. Thank you.

ENGINEERING

Employees News:

In the 3/4/92 issue of The Columbus Dispatch, it was announced that Jasmine Liao of the DAPC Engineering Section passed the State examination for an Engineer-In-Training certificate. This is the first step in obtaining registration as a Professional Engineer in Ohio. Congratulations to Jasmine for this accomplishment.

CEM Program:

The 4th quarter 1991 update of the CEM program statewide overview is attached for your review and comment. Please continue to copy Dave Morehart at the Central Office on all warning letters, visible emission readings, etc. related to CEM issues. Also, performance audits can be conducted at any of your facilities utilizing continuous opacity monitoring systems. Contact Dave (614) 644-3689 to schedule audits or to discuss any issues concerning CEMs.