



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:

Lazarus Gov. Center
P.O. Box 1049
Columbus, OH 43216-1049

**RE: FINAL PERMIT TO INSTALL
ROSS COUNTY
Application No: 06-07700
Fac ID: 0671010028**

CERTIFIED MAIL

Y	TOXIC REVIEW
	PSD
Y	SYNTHETIC MINOR
	CEMS
DDDDD	MACT
	NSPS
	NESHAPS
Y	NETTING
	MAJOR NON-ATTAINMENT
	MODELING SUBMITTED
	GASOLINE DISPENSING FACILITY

DATE: 7/14/2005

Chillicothe Paper Inc.
Katherine Wiedeman
PO Box 2500
Chillicothe, OH 45601

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
309 South Fourth Street, Room 222
Columbus, Ohio 43215

Sincerely,

Michael W. Ahern, Manager
Permit Issuance and Data Management Section
Division of Air Pollution Control

CC: USEPA

SEDO



**Permit To Install
Terms and Conditions**

**Issue Date: 7/14/2005
Effective Date: 7/14/2005**

FINAL PERMIT TO INSTALL 06-07700

Application Number: 06-07700
Facility ID: 0671010028
Permit Fee: **\$8250**
Name of Facility: Chillicothe Paper Inc.
Person to Contact: Katherine Wiedeman
Address: PO Box 2500
Chillicothe, OH 45601

Location of proposed air contaminant source(s) [emissions unit(s)]:
**401 S Paint St
Chillicothe, Ohio**

Description of proposed emissions unit(s):
Modification of No.6 wood waste boiler to burn TDF, NCGs, dewatered sludge, waste paper and other milled wood wastes. No. 7 and No. 8 coal boilers to be used as backup for burning NCGs.

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

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 (i.e., postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. See B.8 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 (i.e., postmarked) to the appropriate Ohio EPA District Office or local air agency every six months, 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. If this permit is for an emissions unit located at a Title V facility, then 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.
- d. The permittee shall report actual emissions pursuant to OAC Chapter 3745-78 for the purpose of collecting Air Pollution Control Fees.

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 re-issuance, or modification
- 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, 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 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 any permit-to-install. The permittee shall pay all applicable permit-to-operate fees within thirty days of the issuance of the invoice.

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 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 and the State and by citizens (to the extent allowed by section 304 of the Act) 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:
 - i. 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 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 ninety (90) 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.

13. Permit-To-Install

A permit-to-install must be obtained pursuant to OAC Chapter 3745-31 prior to "installation" of "any air contaminant source" as defined in OAC rule 3745-31-01, or "modification", as defined in OAC rule 3745-31-01, of any emissions unit included in this permit.

B. State Only Enforceable Permit-To-Install General Terms and Conditions

1. Compliance Requirements

The emissions unit(s) identified in this Permit shall remain in full compliance with all applicable State laws and regulations and the terms and conditions of this permit.

2. Reporting 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 (i.e., postmarked) quarterly, 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. Authorization To Install or Modify

If applicable, authorization to install or modify any new or existing emissions unit included in this permit shall terminate within eighteen months of the effective date of the permit 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)

This permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. This permit does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the application and terms and conditions of this permit. 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 this permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Issuance of this permit 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

If applicable, the applicant shall provide Ohio EPA with a written certification (see enclosed form if applicable) 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., postmarked), 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.

SUMMARY (for informational purposes only)
TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

<u>Pollutant</u>	<u>Tons Per Year</u>
PM10	73.6
SO2	5606.4
NOx	1033.7
CO	1559.3
VOC	89.4
H2SO4	280.3

Part II - FACILITY SPECIFIC TERMS AND CONDITIONS

A. State and Federally Enforceable Permit To Install Facility Specific Terms and Conditions

1. 3745-14-01 General provisions.

[Comment: For dates of non-regulatory government publications, publications of recognized organizations and associations, federal rules, and federal statutory provisions referenced in this rule, see the "Incorporation by Reference" section at the end of this rule.]

(A) This chapter establishes the provisions and requirements to implement a NOx budget trading program in the state of Ohio as a means of control and reduction of NOx emissions. The director authorizes the administrator to assist the director in implementing the state NOx budget trading program as a participant in the federal NOx budget trading program by carrying out the functions set forth for the administrator in this chapter.

(B) Definitions.

(1) Except as otherwise provided in this rule, the definitions in rule 3745-15-01 of the Administrative Code shall apply to this chapter.

(2) As used in this rule and in rules 3745-14-02 to 3745-14-10 of the Administrative Code (pertaining to NOx budget trading program):

(a) "Account certificate of representation" means the completed and signed submission required by rule 3745-14-02 of the Administrative Code for certifying the designation of a NOx authorized account representative, for a NOx budget source or a group of identified NOx budget sources, who is authorized to represent the owners and operators of such source or sources and of the NOx budget units at such source or sources with regard to matters under the NOx budget trading program.

(b) "Account number" means the identification number given by the administrator to each NOx allowance tracking system account.

(c) "Acid Rain emissions limitation" means, as defined in 40 C.F.R. 72.2, a limitation on emissions of sulfur dioxide or NOx under the acid rain program under Title IV of the Clean Air Act.

(d) "Administrator" means the administrator of the United States environmental protection agency or the Administrator's duly authorized representative.

(e) "Allocate" or "allocation" means the determination by the director of the number of NOx allowances to be initially credited to a NOx budget unit or an allocation set-aside.

(f) "ASTM" means the "American Society for Testing and Materials," 100 Barr Harbor Drive, West Conshohocken, Pennsylvania.

(g) "Automated data acquisition and handling system" or "DAHS" means that component of the CEMS, or other emissions monitoring system approved for use under rule 3745-14-08 of the Administrative Code, designed to interpret and convert individual output signals from pollutant concentration monitors, flow monitors, diluent gas monitors, and other component parts of the monitoring system to produce a

continuous record of the measured parameters in the measurement units required by rule 3745-14-08 of the Administrative Code.

(h) "Boiler" means an enclosed fossil or other fuel-fired combustion device used to produce heat and to transfer heat to recirculating water, steam, or other medium., excluding CO boilers associated with combusting CO from fluidized catalytic crackers at petroleum refineries.

(i) "Btu" means British thermal unit.

(j) "Clean Air Act" means the Clean Air Act, 42 U.S.C. 7401, et seq., as amended by Pub. L. no. 101-549 (November 15, 1990).

(k) "Combined cycle system" means a system comprised of one or more combustion turbines, heat recovery steam generators, and steam turbines configured to improve overall efficiency of electricity generation or steam production.

(l) "Combustion turbine" means an enclosed fossil or other fuel-fired device that is comprised of a compressor, a combustor, and a turbine, and in which the flue gas resulting from the combustion of fuel in the combustor passes through the turbine, rotating the turbine.

(m) "Commence commercial operation" means, with regard to a unit that serves a generator, to have begun to produce steam, gas, or other heated medium used to generate electricity for sale or use, including test generation. Except as provided in paragraph (C)(2) or (D) of this rule or rule 3745-14-09 of the Administrative Code, for a unit that is a NOx budget unit under paragraph (C)(1) of this rule on the date the unit commences commercial operation, such date shall remain the unit's date of commencement of commercial operation even if the unit is subsequently modified, reconstructed, or repowered. Except as provided in paragraph (C)(2) or (D) of this rule or rule 3745-14-09 of 3745-14-01 2

the Administrative Code, for a unit that is not a NOx budget unit under paragraph (C)(1) of this rule on the date the unit commences commercial operation, the date the unit becomes a NOx budget unit under paragraph (C)(1) of this rule shall be the unit's date of commencement of commercial operation.

(n) "Commence operation" means to have begun any mechanical, chemical, or electronic process, including, with regard to a unit, start-up of a unit's combustion chamber. Except as provided in paragraph (C)(2) or (D) of this rule or rule 3745-14-09 of the Administrative Code, for a unit that is a NOx budget unit under paragraph (C)(1) of this rule on the date of commencement of operation, such date shall remain the unit's date of commencement of operation even if the unit is subsequently modified, reconstructed, or repowered. Except as provided in paragraph (C)(2) or (D) of this rule or rule 3745-14-09 of the Administrative Code, for a unit that is not a NOx budget unit under paragraph (C)(1) of this rule on the date of commencement of operation, the date the unit becomes a NOx budget unit under paragraph (C)(1) of this rule shall be the unit's date of commencement of operation.

(o) "Common stack" means a single flue through which emissions from two

or more units are exhausted.

(p) "Compliance account" means a NOx allowance tracking system account, established by the administrator for a NOx budget unit under rule 3745-14-06 of the Administrative Code in which the NOx allowance allocations for the unit are initially recorded and in which are held NOx allowances available for use by the unit for a control period for the purpose of meeting the unit's NOx budget emission limitation.

(q) "Continuous emission monitoring system" or "CEMS" means the equipment required under rule 3745-14-08 of the Administrative Code to sample, analyze, measure, and provide, by readings taken at least once every fifteen minutes of the measured parameters, a permanent record of NOx emissions, expressed in pounds per hour for NOx. The following systems are component parts included, to the extent consistent with rule 3745-14-08 of the Administrative Code and 40 C.F.R. part 75, in a continuous emission monitoring system:

(i) Flow monitor;

(ii) NOx pollutant concentration monitors;
3745-14-01 3

(iii) Diluent gas monitor (oxygen or carbon dioxide);

(iv) A continuous moisture monitor;

(v) An automated data acquisition and handling system; and

(vi) A fuel flow monitor (optional).

(r) "Control period" means the period beginning May first of a year and ending on September thirtieth of the same year, inclusive.

(s) "Director" means the director of the Ohio environmental protection agency.

(t) "Electricity for sale under firm contract to the grid" means electricity for sale where the capacity involved is intended to be available at all times during the period covered by a guaranteed commitment to deliver, even under adverse conditions.

(u) "Emissions" means air pollutants exhausted from a unit or source into the atmosphere, as measured, recorded, and reported to the Administrator by the NOx authorized account representative and as determined by the Administrator in accordance with rule 3745-14-08 of the Administrative Code.

(v) "Energy efficiency/renewable energy project" means any project that, during the control period, reduces end-use demand for electricity, including demand-side management practices, or displace electrical energy utilization through the use of wind power, solar power, biomass or landfill methane generation.

(w) "Energy information administration" means the energy information administration of the United States department of energy.

(x) "Excess emissions" means any tonnage of NOx emitted by a NOx budget unit during a control period that exceeds the NOx budget emissions limitation for the unit.

(y) "Fossil fuel" means natural gas, petroleum, coal, or any form of solid, liquid, or gaseous fuel derived from such material.

3745-14-01 4

(z) "Fossil fuel-fired" means, with regard to a unit:

(i) For units that commenced operation before January 1, 1996, the combination of fossil fuel, alone or in combination with any other fuel, where fossil fuel actually combusted comprises more than fifty per cent of the annual heat input, on a Btu basis, during 1995, or, if a unit had no heat input in 1995, during the last year of operation of the unit prior to 1995;

(ii) For units that commenced operation on or after January 1, 1996 and before January 1, 1997, the combustion of fossil fuel, alone or in combination with any other fuel, where fossil fuel actually combusted comprises more than fifty per cent of the annual heat input, on a Btu basis, during 1996; or

(iii) For units that commence operation on or after January 1, 1997:

(a) The combination of fossil fuel, alone or in combination with any other fuel, where fossil fuel actually combusted comprises more than fifty per cent of the annual heat input, on a Btu basis, during any year; or

(b) The combination of fossil fuel, alone or in combination with any other fuel, where fossil fuel is projected to comprise more than fifty per cent of the annual heat input, on a Btu basis, during any year, provided that the unit shall be "fossil fuel-fired" as of the date, during such year, on which the unit begins combusting fossil fuel.

(aa) "General account" means a NOx allowance tracking system account, established under rule 3745-14-06 of the Administrative Code, that is not a compliance account or an overdraft account.

(bb) "Generator" means a device that produces electricity.

(cc) "Heat input" means the product (in mmBtu/time) of the gross calorific value of the fuel (in mmBtu/lb) and the fuel feed rate into a combustion device (in pounds of fuel/time), as measured, recorded, and reported to the director by the NOx authorized account representative and as determined by the director in accordance with rule 3745-14-08 of the Administrative Code, and does not include the heat derived from preheated combustion air, recirculated flue gases, or exhaust from other

3745-14-01 5

sources.

(dd) "Heat input rate" means the amount of heat input (in mmBtu) divided by unit operating time (in hours) or, with regard to a specific fuel, the amount of heat input attributed to the fuel (in mmBtu) divided by the unit operating time (in hours) during which the unit combusts the fuel.

(ee) "Innovative technology project" means any project utilizing technology that has not been adequately demonstrated in practice, but that would have a substantial likelihood of reducing NOx emissions compared to current practices. An innovative technology project could include technology to decrease electrical energy or fuel use either in stationary or mobile sources.

(ff) "Life-of-the-unit, firm power contractual arrangement" means a unit participation power sales agreement under which a utility or industrial customer reserves, or is entitled to receive, a specified amount or percentage of nameplate capacity and associated energy from any specified unit and pays its proportional amount of such unit's total costs, pursuant to a contract:

(i) For the life of the unit; or

(ii) For a cumulative term of no less than thirty years, including contracts that permit an election for early termination; or

(iii) For a period equal to or greater than twenty-five years or seventy per cent of the economic useful life of the unit determined as of the time the unit is built, with option rights to purchase or release some portion of the nameplate capacity and associated energy generated by the unit at the end of the period.

(gg) "Maximum design heat input" means the ability of a unit to combust a stated maximum amount of fuel per hour on a steady state basis, as determined by the physical design and physical characteristics of the unit.

(hh) "Maximum potential hourly heat input" means an hourly heat input used for reporting purposes when a unit lacks certified monitors to report heat input. If the unit intends to use Appendix D of 40 C.F.R. part 75 to report heat input, this value must be calculated, in accordance with 40 C.F.R. part 75, using the maximum fuel flow rate and the maximum 3745-14-01 6

gross calorific value. If the unit intends to use a flow monitor and a diluent gas monitor, this value must be reported, in accordance with 40 C.F.R. part 75, using the maximum potential flow rate and either the maximum carbon dioxide concentration (in per cent carbon dioxide) or the minimum oxygen concentration (in per cent oxygen).

(ii) "Maximum potential NO_x emission rate" means the emission rate of NO_x (in lb/mmBtu) calculated in accordance with Section 3 of Appendix F of 40 C.F.R. part 75, using the maximum potential concentration of NO_x as defined in Section 2 of Appendix A of 40 C.F.R. part 75, and either the maximum oxygen concentration (in per cent oxygen) or the minimum carbon dioxide concentration (in per cent carbon dioxide), under all operating conditions of the unit except for unit start up, shutdown, and upsets.

(jj) "Maximum rated hourly heat input" means a unit-specific maximum hourly heat input (mmBtu) which is the higher of the manufacturer's maximum rated hourly heat input or the highest observed hourly heat input.

(kk) "mmBtu" means million Btu.

(ll) "MWe" means megawatt electrical.

(mm) "Monitoring system" means any monitoring system that meets the requirements of rule 3745-14-08 of the Administrative Code, including a continuous emissions monitoring system, an excepted monitoring system, or an alternative monitoring system.

(nn) "Most stringent state or federal NOx emissions limitation" means the lowest NOx emission limitation (in lb/mmBtu) that is applicable to the unit under state or federal law, regardless of the averaging period to which the emissions limitation applies.

(oo) "Nameplate capacity" means the maximum electrical generating output (in MWe) that a generator can sustain over a specified period of time when not restricted by seasonal or other deratings as measured in accordance with the United States Department of Energy standards.

(pp) "Non-Title V permit" means a federally enforceable permit administered by the director pursuant to the Clean Air Act and regulatory authority under the Clean Air Act, other than Title V of the Clean Air Act and 3745-14-01 7

Chapter 3745-77 of the Administrative Code.

(qq) "NOx" means all oxides of nitrogen which are determined to be ozone precursors, including, but not limited to, nitrogen oxide and nitrogen dioxide, but excluding nitrous oxide.

(rr) "NOx allowance" means a limited authorization by the director or the Administrator under the NOx budget trading program to emit up to one ton of NOx during the control period of the specified year or of any year thereafter, except as provided under rule 3745-14-06(E)(6) of the Administrative Code. No provision of the NOx budget trading program, the NOx budget permit application, the NOx budget permit, or an exemption under paragraph (C)(2)(a) or (D) of this rule and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization, which does not constitute a property right. For purposes of this chapter, except paragraph (B), (C) or (D) of rule 3745-14-05 of the Administrative Code or paragraph (I) of rule 3745-14-09 of the Administrative Code, "NOx allowance" also includes an authorization to emit up to one ton of NOx during the control period of the specified year or of any year thereafter by the state or the Administrator in accordance with a state NOx budget trading program established, and approved and administered by the Administrator, pursuant to 40 C.F.R. 51.121 or in accordance with the NOx budget trading program established by the Administrator in accordance with 40 C.F.R. 52.34.

(ss) "NOx allowance deduction" or "deduct NOx allowances" means the permanent withdrawal of NOx allowances by the Administrator from a NOx allowance tracking system compliance account or overdraft account to account for the number of tons of NOx emissions from a NOx budget unit for a control period, determined in accordance with rules 3745-14-06 and 3745-14-08 of the Administrative Code, or for any other allowance surrender obligation under this chapter.

(tt) "NOx allowances held" or "hold NOx allowances" means the NOx allowances recorded by the Administrator, or submitted to the Administrator for recordation, in accordance with rule 3745-14-06 of the Administrative Code, in a NOx allowance tracking system account.

(uu) "NOx allowance tracking system" means the system by which the

Administrator records allocations, deductions, and transfers of NOx allowances under the NOx budget trading program.

3745-14-01 8

(vv) "NOx allowance tracking system account" means an account in the NOx allowance tracking system established by the Administrator for purposes of recording the allocation, holding, transferring, or deducting of NOx allowances.

(ww) "NOx allowance transfer deadline" means midnight of November thirtieth or, if November thirtieth is not a business day, midnight of the first business day thereafter and is the deadline by which NOx allowances may be submitted for recordation in a NOx budget unit's compliance account, or the overdraft account of the source where the unit is located, in order to meet the unit's NOx budget emissions limitation for the control period immediately preceding such deadline.

(xx) "NOx authorized account representative" means, for a NOx budget source or NOx budget unit at the source, the natural person who is authorized by the owners and operators of the source and all NOx budget units at the source, in accordance with rule 3745-14-02 of the Administrative Code, to represent and legally bind each owner and operator in matters pertaining to the NOx budget trading program or, for a general account, the natural person who is authorized, in accordance with rule 3745-14-06 of the Administrative Code, to transfer or otherwise dispose of NOx allowances held in the general account.

(yy) "NOx budget emissions limitation" means, for a NOx budget unit, the tonnage equivalent of the NOx allowances available for compliance deduction for the unit under paragraphs (E)(1), (E)(2), (E)(5) and (E)(6) of rule 3745-14-06 of the Administrative Code in a control period adjusted by deductions of such NOx allowances to account for actual heat input under paragraph (C)(5) of rule 3745-14-05 of the Administrative Code for the control period, or to account for excess emissions for a prior control period under paragraph (E)(4) of rule 3745-14-06 of the Administrative Code, or to account for withdrawal from the NOx budget trading program or for a change in regulatory status, of a NOx budget opt-in unit under paragraph (G) or (H) of rule 3745-14-09 of the Administrative Code.

(zz) "NOx budget opt-in permit" means a NOx budget permit covering a NOx budget opt-in unit.

(aaa) "NOx budget opt-in unit" means a unit that has been elected to become a NOx budget unit under the NOx budget trading program and whose NOx budget opt-in permit has been issued and is in effect under rule 3745-14-01 9

3745-14-09 of the Administrative Code.

(bbb) "NOx budget permit" means the legally binding and federally enforceable written document, or portion of such document, issued by the director, including any permit revisions, specifying the NOx budget trading program requirements applicable to a NOx budget source, to

each NOx budget unit at the NOx budget source, and to the owners and operators and the NOx authorized account representative of the NOx budget source and each NOx budget unit.

(ccc) "NOx budget source" means a source that includes one or more NOx budget units.

(ddd) "NOx budget trading program" means a multi-state NOx air pollution control and emission reduction program approved and administered by the Administrator pursuant to 40 C.F.R. 51.121 or established by the Administrator pursuant to 40 C.F.R. 52.34, as a means of mitigating the interstate transport of ozone and NOx.

(eee) "NOx budget unit" means a unit that is subject to the NOx emissions limitation under paragraph (C) of this rule or paragraph (A) of rule 3745-14-09 of the Administrative Code.

(fff) "Operating" means, with regard to a unit under paragraph (C)(1)(d)(ii) of rule 3745-14-03 or paragraph (A) of rule 3745-14-09 of the Administrative Code, having documented heat input for more than eight hundred seventy-six hours in the six months immediately preceding the submission of an application for an initial NOx budget permit under paragraph (D)(1) of rule 3745-14-09 of the Administrative Code. The unit's documented heat input shall be determined in accordance with 40 C.F.R. part 75 if the unit was otherwise subject to the requirements of 40 C.F.R. part 75 during that six-month period or shall be based on the best available data reported to the director for the unit if the unit was not otherwise subject to the requirements of 40 C.F.R. part 75 during that six-month period.

(ggg) "Operator" means any person who operates, controls, or supervises a NOx budget unit, a NOx budget source, or unit for which an application for a NOx budget opt-in permit under paragraph (D) of rule 3745-14-09 of the Administrative Code is submitted and not denied or withdrawn and shall include, but not be limited to, any holding company, utility system, or plant manager of such a unit or source.

3745-14-01 10

(hhh) "Opt-in" means to be elected to become a NOx budget unit under the NOx budget trading program through a final, effective NOx budget opt-in permit under rule 3745-14-09 of the Administrative Code.

(iii) "Overdraft account" means the NOx allowance tracking system account, established by the Administrator under rule 3745-14-06 of the Administrative Code, for each NOx budget source where there are two or more NOx budget units.

(jjj) "Owner" means any of the following persons:

(i) Any holder of any portion of the legal or equitable title in a NOx budget unit or in a unit for which an application for a NOx budget opt-in permit under paragraph (D) of rule 3745-14-09 of the Administrative Code submitted and not denied or withdrawn; or

(ii) Any holder of a leasehold interest in a NOx budget unit or in a unit for which an application for a NOx budget opt-in permit under paragraph (D) of rule 3745-14-09 of the Administrative Code is

submitted and not denied or withdrawn; or

(iii) Any purchaser of power from a NOx budget unit or from a unit for which an application for a NOx budget opt-in permit under paragraph (D) of rule 3745-14-09 of the Administrative Code is submitted and not denied or withdrawn under a life-of-the-unit, firm power contractual arrangement (however, unless expressly provided for in a leasehold agreement, owner shall not include a passive lessor, or a person who has an equitable interest through such lessor, whose rental payments are not based, either directly or indirectly, upon the revenues or income from the NOx budget unit or the unit for which an application for a NOx budget opt-in permit under paragraph (D) of rule 3745-14-09 of the Administrative Code is submitted and not denied or withdrawn); or

(iv) With respect to any general account, any person who has an ownership interest with respect to the NOx allowances held in the general account and who is subject to the binding agreement for the NOx authorized account representative to represent that person's ownership interest with respect to the NOx allowances.

(kkk) "Per cent monitor data availability" means, for purposes of paragraph 3745-14-01 11

(D)(1) of rule 3745-14-05 and paragraph (E)(2) of rule 3745-14-09 of the Administrative Code, total unit operating hours for which quality-assured data were recorded in accordance with rule 3745-14-08 of the Administrative Code in a control period divided by the total number of unit operating hours in the control period, and multiplied by one hundred per cent.

(lll) "Potential electrical output capacity" means thirty three per cent of a units maximum design heat input.

(mmm) "Receive" or "receipt of" means, when referring to the director or the Administrator, to come into possession of a document, information, or correspondence (whether sent in writing or by authorized electronic transmission), as indicated in an official correspondence log, or by a notation made on the document, information, or correspondence, by the director or the Administrator in the regular course of business.

(nnn) "Recordation," "record," or "recorded" means, with regard to NOx allowances, the movement of NOx allowances by the Administrator from one NOx allowance tracking system account to another, for purposes of allocation, transfer, or deduction.

(ooo) "Reference method" means any direct test method of sampling and analyzing for an air pollutant as specified in Appendix A of 40 C.F.R. part 60.

(ppp) "Serial number" means, when referring to NOx allowances, the unique identification number assigned to each NOx allowance by the Administrator, under paragraph (D)(3) of rule 3745-14-06 of the Administrative Code.

(qqq) "Source" means any governmental, institutional, commercial, or

industrial structure, installation, plant, building, or facility that emits or has the potential to emit any regulated air pollutant under the Clean Air Act. For purposes of section 502(c) of the Clean Air Act, a source, including a source with multiple units, shall be considered a single facility.

(rrr) "State" means one of the forty-eight contiguous states or a portion thereof or the District of Columbia that is subject to a NOx budget trading program under section 110(c) or section 126 of the Clean Air Act.

3745-14-01 12

(sss) "State trading program budget" means the total number of NOx tons apportioned to all NOx budget units in the state, in accordance with the NOx budget trading program, for use in a given control period.

(ttt) "Submit" or "serve" means to send or transmit a document, information, or correspondence to the person specified in accordance with the applicable regulation:

(i) In person;

(ii) By United States postal service; or

(iii) By other means of dispatch or transmission and delivery.

Compliance with any submission, service, or mailing deadline shall be determined by the date of dispatch, transmission, or mailing and not the date of receipt.

(uuu) "Title V operating permit" means a permit issued under Chapter 3745-77 of the Administrative Code.

(vvv) "Title V operating permit regulations" means Chapters 3745-77 and 3745-78 of the Administrative Code.

(www) "Ton" or "tonnage" means any "short ton" (i.e., two thousand pounds).

For the purpose of determining compliance with the NOx budget emissions limitation, total tons for a control period shall be calculated as the sum of all recorded hourly emissions (or the tonnage equivalent of the recorded hourly emissions rates) in accordance with rule 3745-14-08 of the Administrative Code, with any remaining fraction of a ton equal to or greater than 0.50 ton deemed to equal one ton and any fraction of a ton less than 0.50 ton deemed to equal zero tons.

(xxx) "Unit" means a fossil fuel-fired stationary boiler, combustion turbine, or combined cycle system.

(yyy) "Unit operating day" means a calendar day in which a unit combusts any fuel.

(zzz) "Unit operating hour" or "hour of unit operation" means any hour (or fraction of an hour) during which a unit combusts any fuel.

3745-14-01 13

(aaaa) "Utilization" means the heat input (expressed in mmBtu/time) for a unit. The unit's total heat input for the control period in each year shall be determined in accordance with 40 C.F.R. part 75 if the NOx budget unit was otherwise subject to the requirements of 40 C.F.R. part 75 for the year, or shall be based on the best available data reported to the Administrator for the unit if the unit was not otherwise subject to the

requirements of 40 C.F.R. part 75 for the year.

(3) As used in rule 3745-14-11 of the Administrative Code (pertaining to NOx budget program requirements for Portland cement manufacturing):

(a) "Clinker" means the product of a Portland cement kiln from which finished cement is manufactured by milling and grinding.

(b) "Long dry kiln" means a kiln fourteen feet or larger in diameter, four hundred feet or greater in length, which employs no preheating of the feed. The inlet feed to the kiln is dry.

(c) "Long wet kiln" means a kiln fourteen feet or larger in diameter, four hundred feet or greater in length, which employs no preheating of the feed. The inlet feed to the kiln is a slurry.

(d) "Low-NOx burners" means combustion equipment designed to reduce flame turbulence, delay fuel/air mixing, and establish fuel-rich zones for initial combustion.

(e) "Malfunction" means any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. Failures that are caused in part by poor maintenance or careless operation are not malfunctions.

(f) "Mid-kiln system firing" means the secondary firing in kilns by injecting solid fuel at an intermediate point in the kiln system using a specially designed feed injection mechanism for the purpose of decreasing NOx emissions through:

(i) Burning part of the fuel at a lower temperature; and

(ii) Reducing conditions at the solid fuel injection point that may destroy some of the NOx formed upstream in the kiln burning

3745-14-01 14

zone.

(g) "Portland cement" means a hydraulic cement produced by pulverizing clinker consisting essentially of hydraulic calcium silicates, usually containing one or more of the forms of calcium sulfate as an interground addition.

(h) "Portland cement kiln" means a system, including any solid, gaseous or liquid fuel combustion equipment, used to heat, calcine and fuse raw materials, including limestone and clay, to produce Portland cement clinker.

(i) "Precalciner kiln" means a kiln system where the feed to the kiln is preheated in cyclone chambers which utilize a second burner to calcine material in a separate vessel attached to the preheater prior to the final fusion in a kiln which forms clinker.

(j) "Preheater kiln" means a kiln system where the feed to the kiln is preheated in cyclone chambers prior to the final fusion in a kiln which forms clinker.

(k) "Shutdown" means the cessation of operation of a Portland cement kiln for any purpose.

(l) "Startup" means the setting in operation of a Portland cement kiln for any purpose.

(C) Applicability.

(1) The following units shall be NOx budget units, and any source that includes one or more such units shall be a NOx budget source, subject to the requirements of this chapter:

(a) For electric generating units:

(i) for units that commenced operation before January 1, 1997, a unit serving during 1995 or 1996 a generator that had a nameplate capacity greater than 25 MWe and produced electricity for sale under a firm contract to the electric grid;

(ii) for units that commenced operation on or after January 1, 1997 and before January 1, 1999, a unit serving during 1997 or 1998 a generator that had a nameplate capacity greater than 25 MWe and produced electricity for sale under a firm contract to the electric grid; and

(iii) for units that commence operation on or after January 1, 1999, a unit serving at any time a generator that has a nameplate capacity greater than 25 MWe and produces electricity for sale.

(b) For non-electric generating units:

(i) for units that commenced operation before January 1, 1997, a unit that has a maximum design heat input greater than 250 mmBtu/hr and that did not serve during 1995 or 1996 a generator producing electricity for sale under a firm contract to the electric grid;

(ii) for units that commenced operation on or after January 1, 1997 and before January 1, 1999, a unit that has a maximum design heat input greater than 250 mmBtu/hr and that did not serve during 1997 or 1998 a generator producing electricity for sale under a firm contract to the electric grid;

(iii) for units that commence operation on or after January 1, 1999, a unit with a maximum design heat input greater than 250 mmBtu/hr that:

(a) At no time serves a generator producing electricity for sale; or
(b) At any time serves a generator producing electricity for sale, if any such generator has a nameplate capacity of twenty-five MWe or less and has the potential to use no more than fifty per cent of the potential electrical output capacity of the unit.

(2) The following units shall be exempt from the requirements of the NOx budget trading program:

(a) A unit under paragraph (C)(1) of this rule that has a federally enforceable permit that includes a NOx emission limitation restricting NOx emissions during a control period to twenty-five tons or less and restricts the unit to burning only natural gas or fuel oil during a control period in 2004 or later and that includes the special provisions in paragraph (C)(2)(d) of this rule shall be exempt from the requirements of the NOx budget trading program, except for the provisions of this

3745-14-01 16

3745-14-01 16

paragraph, paragraphs (B), (C)(1) and (F) of this rule and rules 3745-14-05 through 3745-14-07 of the Administrative Code. The NOx emission limitation under this paragraph shall restrict NOx emissions during the control period by one of the following methods:

(i) a restriction on unit operating hours calculated by dividing the federally enforceable emission limitation, in tons, determined in accordance with paragraph (C)(2)(a) of this rule, by the unit's maximum potential hourly NOx mass emissions, which shall equal the unit's maximum rated hourly heat input multiplied by the highest default NOx emission rate applicable to the unit under 40 C.F.R. 75.19(c), Table LM-2; or

(ii) a restriction on unit fuel usage calculated by dividing the federally enforceable emission limitation, in tons, determined in accordance with paragraph (C)(2)(a) of this rule, by the product of the heat value of the fuel to be used multiplied by the default NOx emission rate for the fuel to be used as specified in 40 C.F.R. 75.19(c), Table LM-2.

(b) The exemption under paragraph (C)(2)(a) of this rule shall become effective as follows:

(i) the exemption shall become effective on the date on which the NOx emission limitation and the special provisions in the permit under paragraph (C)(2)(a) of this rule become final; or

(ii) if the NOx emission limitation and the special provisions in the permit under paragraph (C)(2)(a) of this rule become final during a control period and after the first date on which the unit operates during such control period, then the exemption shall become effective on May first of such control period, provided that such NOx emission limitation and the special provisions apply to the unit as of such first date of operation. If such NOx emission limitation and special provisions do not apply to the unit as of such first date of operation, then the exemption under paragraph (C)(2)(a) of this rule shall become effective on October first of the year during which such NOx emission limitation and the special provisions become final.

(c) The director shall provide the Administrator written notice of the issuance 3745-14-01 17

of any permit under paragraph (C)(2)(a) of this rule and, upon request, a copy of the permit.

(d) The following special provisions apply to units exempt under paragraph (C)(2)(a) of this rule.

(i) A unit exempt under paragraph (C)(2)(a) of this rule shall comply with the restriction on unit operating hours and fuel use described in paragraph (C)(2)(a) of this rule during the control period in each year.

(ii) NOx allowances shall be allocated to the unit in accordance with paragraphs (B)(1) to (B)(3) and (C)(1) to (C)(3) of rule 3745-14-05 of the Administrative Code. For each control period

for which the unit is allocated NOx allowances under this paragraph:

(a) The owners and operators of the unit must specify a general account, in which the administrator will record the NOx allowances; and

(b) After the administrator records a NOx allowance allocation under paragraphs (B)(1) to (B)(3) and (C)(1) to (C)(3) of rule 3745-14-05 of the Administrative Code, the administrator will deduct, from the general account under paragraph (C)(2)(d)(ii)(a) of this rule, NOx allowances that are allocated for the same or a prior control period as the NOx allowances allocated to the unit under paragraphs (B)(1) to (B)(3) and (C)(1) to (C)(3) of rule 3745-14-05 of the Administrative Code and that equal the NOx emission limitation (in tons of NOx) on which the unit's exemption under paragraph (C)(2)(a) of this rule is based. The NOx authorized account representative shall ensure that such general account contains the NOx allowances necessary for completion of such deduction.

(iii) A unit exempt under paragraph (C)(2)(a) of this rule shall report hours of unit operation or fuel usage during the control period in each year to the director by November first of that year.

(iv) For a period of five years from the date the records are created, the owners and operators of a unit exempt under paragraph (C)(2)(a) of this rule shall retain, at the source that includes the unit, 3745-14-01 18

records demonstrating that the conditions of the federally enforceable permit under paragraph (C)(2)(a) of this rule were met, including the restrictions on unit operating hours and fuel usage. The five-year period for keeping records may be extended for cause, at any time prior to the end of the period, in writing by the director or the Administrator. The owners and operators bear the burden of proof that the unit met the restriction on unit operating hours and fuel use.

(v) The owners and operators and, to the extent applicable, the NOx authorized account representative of a unit exempt under paragraph (C)(2)(a) of this rule shall comply with the requirements of the NOx budget trading program concerning all periods for which the exemption is not in effect, even if such requirements arise, or must be complied with, after the exemption takes effect.

(vi) On the earlier of the following dates, a unit exempt under paragraph (C)(2)(a) of this rule shall lose its exemption:

(a) The date on which the restriction on unit operating hours and fuel use described in paragraph (C)(2)(a) of this rule is removed from the unit's federally enforceable permit or otherwise becomes no longer applicable to any control

period starting in 2004; or

(b) The first date on which the unit fails to comply, or with regard to which the owners and operators fail to meet their burden of proving that the unit is complying, with the restriction on unit operating hours and fuel use described in paragraph (C)(2)(a) of this rule during any control period starting in 2004.

(vii) A unit that loses its exemption in accordance with paragraph (C)(2)(d)(vi) of this rule shall be subject to the requirements of this chapter. For the purpose of applying permitting requirements under rule 3745-14-03 of the Administrative Code, allocating allowances under rule 3745-14-05 of the Administrative Code, and applying monitoring requirements under rule 3745-14-08 of the Administrative Code, the unit shall be treated as commencing operation and, if the unit is covered by paragraph (C)(1)(a) of this rule, commencing commercial operation on the date the unit loses its exemption.

3745-14-01 19

(viii) A unit that is exempt under paragraph (C)(2)(a) of this rule is not eligible to be a NOx budget opt-unit under rule 3745-14-09 of the Administrative Code.

(D) Retired unit exemption.

(1) This rule applies to any NOx budget unit, other than a NOx budget opt-in unit, that is permanently retired.

(2) Standard provisions.

(a) Any NOx budget unit, other than a NOx budget opt-in unit, that is permanently retired shall be exempt from the NOx budget trading program, except for the provisions of this rule and rules 3745-14-05 to 3745-14-07 of the Administrative Code.

(b) The exemption under paragraph (D)(2)(a) of this rule shall become effective the day on which the unit is permanently retired. Within thirty days of permanent retirement, the NOx authorized account representative of the unit shall submit a statement to the director. A copy of the statement shall be submitted to the Administrator. The statement shall state (in a format prescribed by the director) that the unit is permanently retired and will comply with the requirements of paragraph (D)(3) of this rule.

(c) After receipt of the statement under paragraph (D)(2)(b) of this rule, the director shall amend any permit covering the source at which the unit is located to add the provisions and requirements of the exemption under paragraphs (C)(D)(2)(a) and (C)(D)(3) of this rule.

(3) Special provisions.

(a) A unit exempt under paragraph (D) of this rule shall not emit any NOx, starting on the date that the exemption takes effect.

(b) The director shall allocate NOx allowances under rule 3745-14-05 of the Administrative Code to a unit exempt under paragraph (D) of this rule. For each control period for which the unit is allocated one or more NOx

allowances, the owners and operators of the unit shall specify a general account, in which the administrator will record such NOx allowances.

3745-14-01 20

(c) For a period of five years from the date the records are created, the owners and operators of a unit exempt under paragraph (D) of this rule shall retain at the source that includes the unit, records demonstrating that the unit is permanently retired. The five-year period for keeping records may be extended for cause, at any time prior to the end of the period, in writing by the director or the administrator. The owners and operators bear the burden of proof that the unit is permanently retired.

(d) The owners and operators and, to the extent applicable, the NOx authorized account representative of a unit exempt under this rule shall comply with the requirements of the NOx budget trading program concerning all periods for which the exemption is not in effect, even if such requirements arise, or must be complied with, after the exemption takes effect.

(e) Returning retired units to service.

(i) A unit exempt under paragraph (D) of this rule and located at a source that is required, or but for this exemption would be required, to have a Title V operating permit shall not resume operation unless the NOx authorized account representative of the source submits a complete NOx budget permit application for the unit not less than twelve months before the later of May 1, 2004 or the date on which the unit resumes operation.

(ii) A unit exempt under paragraph (D) of this rule and located at a source that is required, or but for this exemption would be required, to have a non-Title V permit shall not resume operation unless the NOx authorized account representative of the source submits a complete NOx budget permit application for the unit not less than twelve months before the later of May 1, 2004 or the date on which the unit is to first resume operation.

(f) On the earlier of the following dates, a unit exempt under paragraph (D) of this rule shall lose its exemption:

(i) The date on which the NOx authorized account representative submits a NOx budget permit application under paragraph (D)(3)(e) of this rule;

(ii) The date on which the NOx authorized account representative is required under paragraph (D)(3)(e) of this rule to submit a NOx

3745-14-01 21

budget permit application; or

(iii) The date on which the unit resumes operation, if the unit is not required to submit a NOx budget permit application.

(g) For the purpose of applying monitoring requirements under rule 3745-14-08 of the Administrative Code, a unit that loses its exemption under paragraph (D) of this rule shall be treated as a unit that commences operation or commercial operation on the first date on which the unit resumes operation.

(h) A unit that is exempt under paragraph (D) of this rule is not eligible to be a NOx budget opt-in unit under rule 3745-14-09 of the Administrative Code.

(E) Standard requirements.

(1) Permit requirements.

(a) The NOx authorized account representative of each NOx budget unit or NOx budget source required to have a federally enforceable permit for the unit or source shall:

(i) Submit to the director a complete NOx budget permit application in accordance with the deadlines specified in paragraphs (B)(2) and (B)(3) of rule 3745-14-03 of the Administrative Code;

(ii) Submit in a timely manner any supplemental information that the director determines is necessary in order to review a NOx budget permit application and issue or deny a NOx budget permit.

(b) The owners and operators of each NOx budget unit or source required to have a federally enforceable permit shall have a NOx budget permit issued by the director and operate the unit in compliance with such NOx budget permit.

(c) The owners and operators of a NOx budget source that is not otherwise required to have a federally enforceable permit are not required to submit a NOx budget permit application, and to have a NOx budget permit for such NOx budget source.

3745-14-01 22

(2) Monitoring requirements.

(a) The owners and operators and, to the extent applicable, the NOx authorized account representative of each NOx budget source and each NOx budget unit at the source shall comply with the monitoring requirements of rule 3745-14-08 of the Administrative Code.

(b) The emissions measurements recorded and reported in accordance with rule 3745-14-08 of the Administrative Code shall be used to determine compliance by the unit with the NOx budget emissions limitation under paragraph (E)(3) of this rule.

(3) NOx allowances.

(a) The owners and operators of each NOx budget source and each NOx budget unit at the source shall hold NOx allowances available for compliance deductions under paragraph (E) of rule 3745-14-06 of the Administrative Code, as of the NOx allowance transfer deadline, in the unit's compliance account and the source's overdraft account in an amount not less than the total NOx emissions for the control period from the unit, as determined in accordance with rule 3745-14-08 of the Administrative Code, plus any amount necessary to account for actual utilization under paragraph (C)(5) of rule 3745-14-05 of the Administrative Code for the control period.

(b) Each ton of NOx emitted in excess of the NOx budget emissions limitation shall constitute a separate violation of this chapter, the Clean Air Act, and applicable Ohio law.

(c) A NOx budget unit shall be subject to the requirements under paragraph

(E)(3)(a) of this rule starting on the later of May 31, 2004 or the date on which the unit commences operation.

(d) NOx allowances shall be held in, deducted from, or transferred among NOx allowance tracking system accounts in accordance with rules 3745-14-05, 3745-14-06, 3745-14-07 and 3745-14-09 of the Administrative Code.

(e) A NOx allowance shall not be deducted, in order to comply with the requirements under paragraph (E)(3)(a) of this rule, for a control period in a year prior to the year for which the NOx allowance was allocated.

3745-14-01 23

(f) A NOx allowance allocated by the director under the NOx budget trading program is a limited authorization to emit one ton of NOx in accordance with the NOx budget trading program. No provision of the NOx budget trading program, the NOx budget permit application, the NOx budget permit, or an exemption under paragraph (C)(2) or (D) of this rule and no provision of law shall be construed to limit the authority of the United States or the state of Ohio to terminate or limit such authorization.

(g) A NOx allowance allocated by the director under the NOx budget trading program does not constitute a property right.

(h) Upon recordation by the Administrator under rules 3745-14-06 and 3745-14-07 of the Administrative Code, every allocation, transfer, or deduction of a NOx allowance to or from a NOx budget unit's compliance account or the overdraft account of the source where the unit is located is deemed to amend automatically, and become a part of, any NOx budget permit of the NOx budget unit by operation of law without any further review.

(4) The owners and operators of a NOx budget unit that has excess emissions in any control period shall:

(a) Surrender the NOx allowances required for deduction under paragraph (E)(4)(a) of rule 3745-14-06 of the Administrative Code; and

(b) Pay any fine, penalty, or assessment or comply with any other remedy imposed under paragraph (E)(4)(c) of rule 3745-14-06 of the Administrative Code.

(5) Record keeping and reporting requirements.

(a) Unless otherwise provided, the owners and operators of a NOx budget source and each NOx budget unit at the source shall keep on site at the source, or at a central location in Ohio for unattended sources, each of the following documents for a period of five years from the date the document is created: (This period may be extended for cause, at any time prior to the end of five years, in writing by the director or the administrator. Records for unattended sources retained at a central location shall be available immediately at the central location upon the request of the director or administrator and within three days following receipt of a written request from the director or administrator.)

3745-14-01 24

(i) The account certificate of representation for the NOx authorized

account representative for the source and each NOx budget unit at the source and all documents that demonstrate the truth of the statements in the account certificate of representation, in accordance with paragraph (D) of rule 3745-14-02 of the Administrative Code, provided that the certificate and documents shall be retained on site at the source beyond such five-year period until such documents are superseded because of the submission of a new account certificate of representation changing the NOx authorized account representative;

(ii) All emissions monitoring information, in accordance with rule 3745-14-08 of the Administrative Code;

(iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the NOx budget trading program; and

(iv) Copies of all documents used to complete a NOx budget permit application and any other submission under the NOx budget trading program or to demonstrate compliance with the requirements of the NOx budget trading program.

(b) The NOx authorized account representative of a NOx budget source and each NOx budget unit at the source shall submit the reports and compliance certifications required under the NOx budget trading program, including those under rules 3745-14-04, 3745-14-08 and 3745-14-09 of the Administrative Code.

(6) Liability.

(a) Any person who knowingly violates any requirement or prohibition of the NOx budget trading program, a NOx budget permit, or an exemption under paragraph (C)(2) or (D) of this rule shall be subject to enforcement pursuant to applicable state and federal law.

(b) Any person who knowingly makes a false material statement in any record, submission, or report under the NOx budget trading program shall be subject to criminal enforcement pursuant to applicable state and federal law.

(c) No permit revision shall excuse any violation of the requirements of the 3745-14-01 25

NOx budget trading program that occurs prior to the date that the revision takes effect.

(d) Each NOx budget source and each NOx budget unit shall meet the requirements of the NOx budget trading program.

(e) Any provision of the NOx budget trading program that applies to a NOx budget source (including a provision applicable to the NOx authorized account representative of a NOx budget source) shall also apply to the owners and operators of such source and of the NOx budget units at the source.

(f) Any provision of the NOx budget trading program that applies to a NOx budget unit (including a provision applicable to the NOx authorized account representative of a NOx budget unit) shall also apply to the owners and operators of such unit. Except with regard to the

requirements applicable to units with a common stack under rule 3745-14-08 of the Administrative Code, the owners and operators and the NOx authorized account representative of one NOx budget unit shall not be liable for any violation by any other NOx budget unit of which they are not owners or operators or the NOx authorized account representative and that is located at a source of which they are not owners or operators or the NOx authorized account representative.

(7) No provision of the NOx budget trading program, a NOx budget permit application, a NOx budget permit, or an exemption under paragraph (C)(2) or (D) of this rule shall be construed as exempting or excluding the owners and operators and, to the extent applicable, the NOx authorized account representative of a NOx budget source or NOx budget unit from compliance with any other provision of the applicable, approved state implementation plan, a federally enforceable permit, or the Clean Air Act.

(F) Computation of time.

(1) Unless otherwise stated, any time period scheduled, under the NOx budget trading program, to begin on the occurrence of an act or event shall begin on the day the act or event occurs.

(2) Unless otherwise stated, any time period scheduled, under the NOx budget trading program, to begin before the occurrence of an act or event shall be computed so that the period ends the day before the act or event occurs.

3745-14-01 26

(3) Unless otherwise stated, if the final day of any time period under the NOx budget trading program, except for the control period defined in paragraph (B)(2)(r) of this rule, falls on a weekend or a state or federal holiday, the time period shall be extended to the next business day.

(G) Incorporation by Reference. This chapter includes references to certain matter or materials. The text of the incorporated materials is not included in the regulations contained in this chapter. The materials are hereby made a part of the regulations in this chapter. For materials subject to change, only the specific version specified in the regulation are incorporated. Material is incorporated as it exists on the effective date of this rule. Except for subsequent annual publication of existing (unmodified) Code of Federal Regulation compilations, any amendment or revision to a referenced document is not incorporated unless and until this rule has been amended to specify the new dates.

(1) Availability. The materials incorporated by reference are available as follows:

(a) Clean Air Act as defined in this rule. Information and copies may be obtained by writing to: "Superintendent of Documents, Attn: New Orders, PO Box 371954, Pittsburgh, PA 15250-7954." The full text of the Act as amended in 1990 is also available in electronic format at www.epa.gov/oar/caa/. A copy of the Act is also available for inspection and copying at most public libraries and "The State Library of Ohio."

(b) Code of Federal Regulations. Information and copies may be obtained by writing to: "Superintendent of Documents, Attn: New Orders, PO Box 371954, Pittsburgh, PA 15250-7954." The full text of the CFR is also available in electronic format at www.access.gpo.gov/nara/cfr/. The

CFR compilations are also available for inspection and copying at most Ohio public libraries and "The State Library of Ohio."

(c) Ohio EPA Weekly Review. Information and copies may be obtained by writing to: "Ohio EPA Legal Department, 122 S. Front Street, Columbus, Ohio, 43125." The full text of the Ohio EPA Weekly Review is also available in electronic format at www.epa.state.oh.us/legal/pubnote.html/. The Ohio EPA Weekly Review compilations are also available for inspection and copying at most Ohio public libraries and "The State Library of Ohio."

(2) Incorporated materials.

(a) 40 CFR 52.34; "Action on petitions submitted under section 126 relating to emissions of nitrogen oxides;" 64 FR 28318, May 25, 1999, as amended at 64 FR 33961, June 24, 1999; 65 FR 2042, Jan. 13, 2000; 65 3745-14-01 27
FR 2726, Jan. 18, 2000.

(b) 40 CFR 51.121; "Findings and requirements for submission of State implementation plan revisions relating to emissions of oxides of nitrogen;" 63 FR 57491, Oct. 27, 1998, as amended at 63 FR 71225, Dec. 24, 1998; 64 FR 26305, May 14, 1999; 65 FR 11230, Mar. 2, 2000; 65 FR 56251, Sept. 18, 2000.

(c) 40 CFR Part 60, Appendix A; "Test Methods 1 through 29;" as published in the July 1, 2003 Code of Federal Regulations.

(d) 40 CFR 72.2; "Definitions;" 58 FR 3650, Jan. 11, 1993, as amended at 58 FR 15647, Mar. 23, 1993; 58 FR 33770, June 21, 1993; 58 FR 40747, July 30, 1993; 60 FR 17111, Apr. 4, 1995; 60 FR 18468, Apr. 11, 1995; 60 FR 26514, May 17, 1995; 62 FR 55475, Oct. 24, 1997; 63 FR 57498, Oct. 27, 1998; 63 FR 68404, Dec. 11, 1998; 64 FR 25842, May 13, 1999; 64 FR 28586, May 26, 1999; 67 FR 40420, June 12, 2002; 67 FR 53504, Aug. 16, 2002.

(e) 40 CFR Part 75; "Continuous Emission Monitoring;" as published in the July 1, 2003 Code of Federal Regulations.

(f) 40 CFR 75.19; "Optional SO₂, NO_x, and CO₂ emissions calculation for low mass emissions (LME) units;" 63 FR 57500, Oct. 27, 1998, as amended at 64 FR 28592, May 26, 1999; 64 FR 37582, July 12, 1999; 67 FR 40424, 40425, June 12, 2002; 67 FR 53504, Aug. 16, 2002.

(g) 40 CFR Part 75, Appendix A; "Specifications and Test Procedures;" 58 FR 3701, Jan. 11, 1993, as amended at 60 FR 26541-26546, 26569-26570, May 17, 1995; 61 FR 25582, May 22, 1996; 61 FR 59162, Nov. 20, 1996; 63 FR 57512, Oct. 27, 1998; 64 FR 28631-28643, May 26, 1999; 64 FR 37582, July 12, 1999; 67 FR 40448, 40449, 40452, 40453, 40455, June 12, 2002; 67 FR 53505, Aug. 16, 2002.

(h) 40 CFR Part 75, Appendix D; "Optional SO₂ Emissions Data Protocol for Gas-Fired and Oil-Fired Units;" 58 FR 3701, Jan. 11, 1993, as amended at 60 FR 26548, 26551, May 17, 1995; 61 FR 25585, May 22, 1996; 61 FR 59166, Nov. 20, 1996; 63 FR 57513, Oct. 27, 1998; 64 FR 28652-28663, May 26, 1999; 64 FR 37582, July 12, 1999; 67 FR

40460, 40472, June 12, 2002; 67 FR 53505, Aug. 16, 2002.

(i) 40 CFR Part 75, Appendix F; "Conversion Procedures;" 58 FR 3701, Jan. 11, 1993; Redesignated and amended at 60 FR 26553-26556, 26571, May 17, 1995; 61 FR 25585, May 22, 1996; 61 FR 59166, Nov. 20, 1996; 63 FR 57513, Oct. 27, 1998; 64 FR 28666-28671, May 26, 1999; 64 FR 37582, July 12, 1999; 67 FR 40474, 40475, June 12, 2002; 67 3745-14-01 28 FR 53505, Aug. 16, 2002.

(j) Clean Air Act, as amended November 15, 1990, 42 U.S.C. 7401 et seq.

(k) Clean Air Act, "TITLE IV - ACID DEPOSITION CONTROL;" July 14, 1955, ch. 360, title IV, Sec. 401 through 416, as added Pub. L. 101-549, title IV, Secs. 401-416, Nov. 15, 1990, 104 Stat. 2584, 2585, 2589, 2592, 2605, 2613, 2616, 2619, 2621, 2623, 2624, 2625, 2626. 3745-14-01 29

Effective: 05/25/2004

R.C. 119.032 review dates: 03/31/2005

CERTIFIED ELECTRONICALLY

Certification

05/14/2004

Date

Promulgated Under: 119.03

Statutory Authority: 3704.03(E)

Rule Amplifies: 3704.03 (A), (D) and (E)

Prior Effective Dates: 6/21/1994, 7/18/2002

3745-14-01 30

3745-14-02 The NO_x authorized account representative.

(A) Duties of the NO_x authorized account representative.

(1) Except as provided under paragraph (B) of this rule, each NO_x budget source, including all NO_x budget units at the source, shall have one and only one NO_x authorized account representative, with regard to all matters under the NO_x budget trading program concerning the source or any NO_x budget unit at the source.

(2) The NO_x authorized account representative of the NO_x budget source shall be selected by an agreement binding on the owners and operators of the source and all NO_x budget units at the source.

(3) Upon receipt by the Administrator of a complete account certificate of representation under paragraph

(D) of this rule, the NO_x authorized account representative of the source shall represent and, by his or her representations, actions, inactions, or submissions, legally bind each owner and operator of the NO_x budget source represented and each NO_x budget unit at the source in all matters pertaining to the NO_x budget trading program, notwithstanding any agreement between the NO_x authorized account representative and such owners and operators. The owners and operators shall be bound by any decision or order issued to the NO_x authorized account representative by the director, the Administrator, or a court regarding the source or unit.

(4) No NO_x budget permit shall be issued, and no NO_x allowance tracking system account shall be established for a NO_x budget unit at a source, until the Administrator has received a complete account certificate of representation under paragraph (D) of this rule for a NO_x authorized account representative of the source and the NO_x budget units at the source.

(5) NOx budget trading program submissions

(a) Each submission under the NOx budget trading program shall be submitted, signed, and certified by the NOx authorized account representative for each NOx budget source on behalf of which the submission is made. Each such submission shall include the following certification statement by the NOx authorized account representative:

"I am authorized to make this submission on behalf of the owners and operators of the NOx budget sources or NOx budget units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment."

(b) The director and the Administrator shall accept or act on a submission made on behalf of owner or operators of a NOx budget source or a NOx budget unit only if the submission has been made, signed, and certified in accordance with paragraph (A)(5)(a) of this rule.

(B) The alternate NOx authorized account representative.

(1) An account certificate of representation may designate one and only one alternate NOx authorized account representative who may act on behalf of the NOx authorized account representative. The agreement by which the alternate NOx authorized account representative is selected shall include a procedure for authorizing the alternate NO x authorized account representative to act in lieu of the NOx authorized account representative.

(2) Upon receipt by the Administrator of a complete account certificate of representation under paragraph

(D) of this rule, any representation, action, inaction, or submission by the alternate NOx authorized account representative shall be deemed to be a representation, action, inaction, or submission by the NOx authorized account representative.

(3) Except in paragraphs (A)(1), (C) and (D) of this rule and paragraph (B) of rule 3745-14-06 of this chapter, whenever the term "NOx authorized account representative" is used in this part, the term shall be construed to include the alternate NOx authorized account representative.

(C) Changing the NOx authorized account representative and the alternate NOx authorized account representative; changes in the owners and operators.

(1) The NOx authorized account representative may be changed at any time upon receipt by the Administrator of a superseding complete account certificate of representation. Notwithstanding any such change, all representations, actions, inactions, and submissions by the previous NOx authorized account representative prior to the time and date when the Administrator receives the superseding account certificate of representation shall be binding on the new NOx authorized account representative and the owners and operators of the NOx budget source and the NOx budget units at the source.

(2) The alternate NOx authorized account representative may be changed at any time upon receipt by the

Administrator of a superseding complete account certificate of representation. Notwithstanding any such change, all representations, actions, inactions, and submissions by the previous alternate NOx authorized account representative prior to the time and date when the Administrator receives the superseding account certificate of representation shall be binding on the new alternate NOx authorized account representative and the owners and operators of the NOx budget source and the NOx budget units at the source.

(3) Changes in the owners and operators.

(a) In the event a new owner or operator of a NOx budget source or a NOx budget unit is not included in the list of owners and operators submitted in the account certificate of representation, such new owner or operator shall be deemed to be subject to and bound by the account certificate of representation, the representations, actions, inactions, and submissions of the NOx authorized account representative and any alternate NOx authorized account representative of the source or unit, and the decisions, orders, actions, and inactions of the director or the Administrator, as if the new owner or operator were included in such list.

(b) Within thirty days following any change in the owners and operators of a NOx budget source or a NOx budget unit, including the addition of a new owner or operator, the NOx authorized account representative or alternate NOx authorized account representative shall submit a revision to the account certificate of representation amending the list of owners and operators to include the change.

(D) Account certificate of representation.

(1) A complete account certificate of representation for a NOx authorized account representative or an

alternate NOx authorized account representative shall include the following elements in a format prescribed by the Administrator:

(a) identification of the NOx budget source and each NOx budget unit at the source for which the account certificate of representation is submitted;

(b) the name, address, e-mail address (if any), telephone number, and facsimile transmission number (if any) of the NOx authorized account representative and any alternate NOx authorized account representative;

(c) a list of the owners and operators of the NOx budget source and of each NOx budget unit at the source;

(d) the following certification statement by the NOx authorized account representative and any alternate NOx authorized account representative:

"I certify that I was selected as the NOx authorized account representative or alternate NOx authorized account representative, as applicable, by an agreement binding on the owners and operators of the NOx budget source and each NOx budget unit at the source. I certify that I have all the necessary authority to carry out my duties and responsibilities under the NOx budget trading program on behalf of the owners and operators of the NOx budget source and of each NOx budget unit at the source and that each such owner and operator shall be fully bound by my representations, actions, inactions, or submissions and by any decision or order issued to me by the director, the Administrator, or a court regarding the source or unit."

(e) the signature of the NOx authorized account representative and any alternate NOx authorized account representative and the dates signed.

(2) Unless otherwise required by the director or the Administrator, documents of agreement referred to

in the account certificate of representation shall not be submitted to the director or the Administrator. Neither the director nor the Administrator shall be under any obligation to review or evaluate the sufficiency of such documents, if submitted.

(E) Objections concerning the NOx authorized account representative.

(1) Once a complete account certificate of representation has been submitted and received, the director

and the Administrator shall rely on the account certificate of representation unless and until a superseding complete account certificate of representation is received by the Administrator.

(2) Except as provided in paragraphs (C)(1) and (C)(2) of this rule, no objection or other communication

submitted to the director or the Administrator concerning the authorization, or any representation, action, inaction, or submission of the NOx authorized account representative shall affect any representation, action, inaction, or submission of the NOx authorized account representative or the finality of any decision or order by the director or the Administrator under the NOx budget trading program.

(3) Neither the director nor the Administrator will adjudicate any private legal dispute concerning the authorization or any representation, action, inaction, or submission of any NOx authorized account representative, including private legal disputes concerning the proceeds of NOx allowance transfers.

Effective date: July 18, 2002

R.C. 119.033 Review dates: 03/31/2005

Certified Electronically

07/08/2002 10:08 AM

Promulgated Under: 119.03

Statutory Authority: 3704.03(E)

Rule Amplifies: 3704.03(A), (D), and (E)

Prior Effective Dates: June 21, 1994

3745-14-03 The NOx budget permit.

(A) General NOx budget trading program permit requirements.

(1) For each NOx budget source required to have a federally enforceable operating permit, such permit shall include a NOx budget permit administered by the director.

(a) For NOx budget sources required to have a Title V operating permit, the NOx budget portion of the Title V permit shall be administered in accordance with Chapter 3745-77 of the Administrative Code except as provided otherwise by this rule or rule 3745-14-09 of the Administrative Code.

(b) For NOx budget sources required to have a non-Title V operating permit, the NOx budget portion of the non-Title V operating permit shall be administered in accordance with Chapter 3745-35 of the Administrative Code, except as provided otherwise by this rule or rule 3745-14-09 of the Administrative Code.

(2) Each NOx budget permit (including a draft or proposed NOx budget permit, if applicable) shall contain all applicable NOx budget trading program requirements and shall be a complete and segregable portion of the permit required under paragraph (A)(1) of this rule.

(B) Submission of NOx budget permit applications.

(1) The NOx authorized account representative of any NOx budget source required to have a federally enforceable operating permit shall submit to the director a complete NOx budget permit application by the applicable deadline in paragraph (B)(2) of this rule.

(2) Application time.

(a) For NOx budget sources required to have a Title V operating permit:

(i) For any source, with one or more NOx budget units that commence operation before January 1, 2000, the NOx authorized account

representative shall submit a complete NOx budget permit application covering such NOx budget units to the director before May 1, 2003;

(ii) For any source, with one or more NOx budget units that commence

[stylesheet: rule.xsl 2.14, authoring tool: i4i 2.01 May 21, 2003, (dv: 6, p: 13238, pa: 18810, ra: 64874, d: 58103)] print date: 05/14/2004 09:05 AM

ACTION: Final DATE: 05/14/2004 8:13 AM

operation on or after January 1, 2000, the NOx authorized account representative shall submit a complete NOx budget permit application covering such NOx budget unit to the director at least twelve months before the later of May 1, 2004 or the date on which the NOx budget unit commences operation.

(b) For NOx budget sources required to have a non-Title V operating permit:

(i) For any source, with one or more NOx budget units that commence operation before January 1, 2000, the NOx authorized account representative shall submit a complete NOx budget permit application covering such NOx budget units to the director before May 1, 2003;

(ii) For any source, with any NOx budget unit that commences operation on or after January 1, 2000, the NOx authorized account representative shall submit a complete NOx budget permit application covering such NOx budget unit to the director at least twelve months before the later of May 1, 2004 or the date on which the NOx budget unit commences operation.

(3) Duty to reapply.

(a) For a NOx budget source required to have a Title V operating permit, the NOx authorized account representative shall submit a complete NOx budget permit renewal application for the NOx budget source covering the NOx budget units at the source in accordance with paragraph (E) of rule 3745-77-08 Chapter 3745-77 of the Administrative Code.

(b) For a NOx budget source required to have a non-Title V permit, the NOx authorized account representative shall submit a complete NOx budget permit application for the NOx budget source covering the NOx budget units at the source in accordance with rule 3745-35-02 of the Administrative Code.

(C) Information requirements for NOx budget permit applications.

(1) A complete NOx budget permit application shall include the following elements concerning the NOx budget source for which the application is submitted, in a format prescribed by the director:

(a) Identification of the NOx budget source, including plant name and the 3745-14-03 2

ORIS (office of regulatory information systems) or facility code assigned to the source by the United States energy information administration, or a facility code assigned to the source by the administrator;

(b) Identification of each NOx budget unit at the NOx budget source and whether it is a NOx budget unit under paragraph (C)(1) of rule 3745-14-01 or rule 3745-14-09 of the Administrative Code;

Chillicothe Paper Inc.

PTI Application: 06-07700

Issued: 7/14/2005

Facility ID: 067101002

(c) The standard requirements under paragraph (E) of rule 3745-14-01 of the Administrative Code; and

(d) For each NOx budget opt-in unit at the NOx budget source, the following certification statements by the NOx authorized account representative:

(i) "I certify that each unit for which this permit application is submitted under rule 3745-14-09 of the Administrative Code is not a NOx budget unit under paragraph (C)(1) of rule 3745-14-01 of the Administrative Code and is not covered by an exemption under paragraph (C)(2) or (D) of rule 3745-14-01 of the Administrative Code that is in effect."

(ii) If the application is for an initial NOx budget opt-in permit, "I certify that each unit for which this permit application is submitted under rule 3745-14-09 of the Administrative Code is currently operating, as that term is defined under paragraph (B)(2) of rule 3745-14-01 of the Administrative Code."

(D) NOx budget permit contents.

(1) Each NOx budget permit (including any draft or proposed NOx budget permit, if applicable) shall contain, in a format prescribed by the director, all elements required for a complete NOx budget permit application under paragraph (C) of this rule.

(2) Each NOx budget permit is deemed to incorporate automatically the definitions of terms under paragraph (B) of rule 3745-14-01 of the Administrative Code and, upon recordation by the Administrator, in accordance with rules 3745-14-06 and 3745-14-07 of the Administrative Code, every allocation, transfer, or deduction of a NOx allowance to or from the compliance accounts of the NOx budget units covered by the permit or the overdraft account of the NOx budget source covered by the permit.

3745-14-03 3

(E) NOx budget permit revisions.

(1) For a NOx budget source with a Title V operating permit, except as provided in paragraph (D)(2) of this rule, the director shall revise the NOx budget permit, as necessary, in accordance with rule 3745-77-08 of the Administrative Code.

(2) For a NOx budget source with a non-Title V operating permit, except as provided in paragraph (D)(2) of this rule, the director shall revise the NOx budget permit, as necessary, in accordance with rule 3745-35-02 of the Administrative Code.

3745-14-03 4

Effective: 05/25/2004

R.C. 119.032 review dates: 03/31/2005

CERTIFIED ELECTRONICALLY

Certification

05/14/2004

Date

Promulgated Under: 119.03

Statutory Authority: 3704.03(E)

Rule Amplifies: 3704.03(A), (D) and (E)

Prior Effective Dates: 6/21/1994, 7/18/2002

3745-14-03 5

3745-14-04 Compliance certification.

(A) The compliance certification report.

(1) For each control period in which one or more NOx budget units at a source are subject to the NOx budget emissions limitation, the NOx authorized account representative of the source shall submit to the director and the Administrator, by November 30 of that year, a compliance certification report for each source covering all such units.

(2) The NOx authorized account representative shall include in the compliance certification report under

paragraph (A)(1) of this rule the following elements, in a format prescribed by the Administrator, concerning each unit at the source and subject to the NOx budget emissions limitation for the control period covered by the report:

(a) identification of each NOx budget unit;

(b) at the NOx authorized account representative's option, the serial numbers of the NOx allowances that are to be deducted from each unit's compliance account under paragraph (E) of rule 3745-14-06 of this chapter for the control period;

(c) at the NOx authorized account representative's option, for units sharing a common stack and having NOx emissions that are not monitored separately or apportioned in accordance with rule 3745-14-08 of this chapter, the percentage of allowances that is to be deducted from each unit's compliance account under paragraph (E)(5) of rule 3745-14-06 of this chapter; and

(d) the compliance certification under paragraph (A)(3) of this rule.

(3) In the compliance certification report under paragraph (A)(1) of this rule, the NOx authorized account

representative shall certify, based on reasonable inquiry of those persons with primary responsibility for operating the source and the NOx budget units at the source in compliance with the NOx budget trading program, whether each NOx budget unit for which the compliance certification is submitted was operated during the calendar year covered by the report in compliance with the requirements of the NOx budget trading program applicable to the unit, including all the following:

(a) whether the unit was operated in compliance with the NOx budget emissions limitation;

(b) whether the monitoring plan that governs the unit has been maintained to reflect the actual operation and monitoring of the unit, and contains all information necessary to attribute NOx emissions to the unit, in accordance with rule 3745-14-08 of this chapter;

(c) whether all the NOx emissions from the unit, or a group of units (including the unit) using a common stack, were monitored or accounted for through the missing data procedures and reported in the quarterly monitoring reports, including whether conditional data were reported in the quarterly reports in accordance with rule 3745-14-08 of this chapter, and if conditional data were reported, the owner or operator shall indicate whether the status of all conditional data has been resolved and all necessary quarterly report resubmissions have been made;

(d) whether the facts that form the basis for certification under rule 3745-14-08 of this chapter of each monitor at the unit or a group of units (including the unit) using a common stack, or for using an excepted monitoring method or alternative monitoring method approved under rule 3745-14-08 of this chapter, if any, have changed.

(e) If a change is required to be reported under paragraph (A)(3)(d) of this rule, specify the nature of the change, the reason for the change, when the change occurred, and how the unit's compliance status was determined subsequent to the change, including what method was used to determine emissions when a change mandated the need for monitor recertification.

(B) Director's or Administrator's action on compliance certifications.

(1) The director or Administrator may review and conduct independent audits concerning any compliance

certification or any other submission under the NOx budget trading program and make appropriate adjustments of the information in the compliance certifications or other submissions.

(2) The Administrator may deduct NOx allowances from or transfer NOx allowances to a unit's compliance account or a source's over draft account based on the information in the compliance certifications or other submissions, as adjusted under paragraph (B)(1) of this rule.

Effective date: July 18, 2002

R.C. 119.033 Review dates: 03/31/2005

Certified Electronically

07/08/2002 10:08 AM

Promulgated Under: 119.03

Statutory Authority: 3704.03(E)

Rule Amplifies: 3704.03(A), (D), and (E)

Prior Effective Dates: June 21, 1994

3745-14-05 NOx allowance allocations.

[Comment: For dates of non-regulatory government publications, publications of recognized organizations and associations, federal rules, and federal statutory provisions referenced in this rule, see paragraph 3745-14-01(G) of the Administrative Code titled "Incorporation by Reference."

(A) The state trading program budget allocated by the director under paragraph (C) of this rule for a control period shall equal the total number of tons of NOx emissions apportioned to the NOx budget units in Ohio for the control period, as determined by the applicable, approved state implementation plan, less the sum of the NOx emission limitations (in tons) for each unit exempt under paragraph (C)(2) of rule 3745-14-01 of the Administrative Code that is not allocated any NOx allowances under paragraph (C)(2) or (C)(3) of this rule for the control period and whose NOx emission limitation is not included in the current calculations under paragraph (C)(4)(e)(ii)(b) of this rule for the control period. (Ohio's trading program budget is 49,499 49,460 NOx allowances: 45,432 for units under paragraph (C)(1)(a) of rule 3745-14-01 of the Administrative Code, and 4,0674,028 for units under paragraph (C)(1)(b) of rule 3745-14-01 of the Administrative Code.)

(B) Timing requirements for NOx allowance allocations.

(1) The NOx allowance allocations, determined in accordance with paragraphs (C)(1) to (C)(3) of this rule, for the control periods in 2004 through 2007 are set forth in appendices A and B of this rule.

(2) By April 1, 2005, the director shall submit to the administrator the NOx allowance allocations, determined in accordance with paragraphs (C)(1) to (C)(3) of this rule, for the control periods in 2008 through 2012.

(3) By April 1, 2010, by April 1 of 2015, and thereafter by April first of the year that is five years after the last year for which NOx allowance allocations are determined, the director shall submit to the administrator the NOx allowance allocations determined in accordance with paragraphs (C)(1) to (C)(3) of this rule, for the control periods in the years that are three, four, five, six and seven years after the applicable deadline under this paragraph.

(4) By April 1, 2004 and April first of each year thereafter, the director shall submit to the administrator the NOx allowance allocations determined in accordance with paragraph (C)(4) of this rule, for the control period in the year of the applicable deadline under this paragraph.

(5) If the director fails to submit to the administrator the NOx allowance allocations in accordance with paragraphs (B)(1) to (B)(3) of this rule, the administrator shall allocate, for the applicable control period, the same number of NOx allowances to NOx budget units as were allocated to the NOx budget units for the preceding control period.

(6) The director shall make available to the public each determination of NOx allowance allocations under this rule according to the following procedures:

(a) Notice shall be given: by publication in a newspaper of general circulation in the area where the source is located and in the "Ohio EPA Weekly Review"; to persons on a mailing list developed by the director, including those who request in writing to be on the list; and by other means if necessary to assure adequate notice to the affected public;

(b) The notice shall identify the names and addresses of the affected facilities; the NOx allowances to be assigned to each NOx budget unit at each facility; the name and address of the director; and the name, address, and telephone number of a person from whom interested persons may obtain additional information;

(c) The director shall provide at least thirty days for public comment;

(d) The director shall keep a record of the commenters and also of the issues raised during the public participation process and such records shall be available to the public.

(C) NOx allowance allocations.

(1) Heat inputs used to calculate NOx allowance allocations.

(a) The heat input (in mmBtu) used for calculating NOx allowance allocations for each NOx budget unit under paragraph (C)(1) of rule 3745-14-01 of the Administrative Code shall be:

(i) For a NOx allowance allocation under paragraph (B)(1) of this rule:

(a) For a unit under paragraph (C)(1)(a) of rule 3745-14-01 of the Administrative Code, the average of the two highest amounts of the unit's heat input for the control periods in 1995 through 1998; or

(b) For a unit under paragraph (C)(1)(b) of rule 3745-14-01 of the 3745-14-05 2

Administrative Code, the control period in 1995 or, if the director determines that reasonably reliable data are available for control periods in 1996 through 1998, the average of the two highest amounts of the unit's heat input for the control periods in 1995 through 1998.

(ii) For a NOx allowance allocation under paragraphs (B)(2) and (B)(3) of this rule, the average of the unit's two highest control period heat input in the years that are four, five, six, seven and eight years before the first year for which the allocation is being calculated;

(iii) For a NO_x allowance allocation under paragraphs (B)(2) and (B)(3) of this rule, if a NO_x budget unit does not have five years of control period heat input, the following shall apply:

(a) For a NO_x budget unit with more than two years of control period heat input data the average of the two highest control period heat input;

(b) For a NO_x budget unit with only two years of control period heat input data, the average of the control period heat input for those two years; or

(c) For a NO_x budget unit with one year of control period heat input data, the heat input for that control period.

(b) The unit's heat input for the control period in each year specified in paragraph (C)(1)(a) of this rule shall be determined in accordance with 40 C.F.R. part 75. Notwithstanding the first sentence of this paragraph (C)(1)(b) of this rule:

(i) For a NO_x allowance allocation under paragraph (B) of this rule, such heat input shall be determined using the best available data reported to the director for the unit if the unit was not otherwise subject to the requirements of 40 C.F.R. Part 75 for the control period;

(ii) For a NO_x allowance allocation under paragraph (B)(2) or (B)(3) of this rule for a unit exempt under paragraph (C)(2) of rule 3745-14-01 of the Administrative Code, such heat input shall be treated as zero if the unit is exempt under paragraph (C)(2) of rule 3745-14-05 3

3745-14-01 of the Administrative Code during the control period.

(2) For each group of control periods specified in paragraphs (B)(1) to (B)(3) of this rule, the director shall allocate, to all NO_x budget units under paragraph (C)(1)(a) of rule 3745-14-01 of the Administrative Code that commenced operation before May 1, 1997 for allocations under paragraph (B)(1) of this rule; May 1, 2003 for allocations under paragraph (B)(2) of this rule; and May first of the year five years before the first year for which the allocation under paragraph (B)(3) of this rule is being calculated, a total number of NO_x allowances equal to ninety five per cent in 2004 and 2005, and ninety three per cent in all subsequent years, of the portion of the state trading program budget under paragraph (A) of this rule covering such units. The director shall allocate allowances in accordance with the following procedures:

(a) The director shall allocate NO_x allowances to each NO_x budget unit under paragraph (C)(1)(a) of rule 3745-14-01 of the Administrative Code for each control period in an amount equaling the lesser of 0.15 lb/mmBtu or the unit's most stringent state or federal NO_x emission limitation multiplied by the heat input determined under paragraph (C)(1) of this rule, divided by 2000 lb/ton, rounded to the nearest whole NO_x allowance as appropriate.

(b) If the initial total number of NO_x allowances allocated to all NO_x budget units under paragraph (C)(1)(a) of rule 3745-14-01 of the Administrative Code for a control period under paragraph (C)(2)(a) of

this rule does not equal ninety-five per cent in 2004 and 2005, and ninety three per cent in all subsequent years, of the state trading program budget under paragraph (A) of this rule covering such units, the director shall adjust the total number of NOx allowances allocated to all such NOx budget units for the control period under paragraph (C)(2)(a) of this rule so that the total number of NOx allowances allocated equals ninety five per cent in 2004 and 2005, and ninety three per cent in all subsequent years, of such portion of the state trading program budget. This adjustment shall be made by multiplying each unit's allocation by ninety five per cent in 2004 and 2005, and ninety three per cent in all subsequent years, of such portion of the state trading program budget under paragraph (A) of this rule, dividing by the total number of NOx allowances allocated under paragraph (C)(2)(a) of this rule for the control period, and rounding to the nearest whole number of NOx allowances as appropriate.

(3) For each group of control periods under paragraphs (B)(1) to (B)(3) of this rule, the director shall allocate to all NOx budget units under paragraph (C)(1)(b) of rule 3745-14-01 of the Administrative Code that commenced operation 3745-14-05 4

before May 1, 1997 for allocations under paragraph (B)(1) of this rule; May 1, 2003 for allocations under paragraph (B)(2) of this rule, and May first of the year five years before the first year for which the allocation under paragraph (B)(3) of this rule is being calculated, a total number of NOx allowances equal to ninety-five per cent of portion of the state trading program budget under paragraph (A) of this rule covering such units. The director shall allocate allowances in accordance with the following procedures:

(a) The director shall allocate NOx allowances to each NOx budget unit under paragraph (C)(1)(b) of rule 3745-14-01 of the Administrative Code for each control period in an amount equaling the lesser of 0.17 lb/mmBtu or the unit's most stringent state or federal NOx emission limitation multiplied by the heat input determined under paragraph (C)(1) of this rule, divided by 2,000 lb/ton, and rounded to the nearest whole number of NOx allowances as appropriate.

(b) If the initial total number of NOx allowances allocated to all NOx budget units under paragraph (C)(1)(b) of rule 3745-14-01 of the Administrative Code for a control period under paragraph (C)(3)(a) of this rule does not equal ninety-five per cent of the portion of the state trading program budget under paragraph (A) of this rule covering such units, the director shall adjust the total number of NOx allowances allocated to all such NOx budget units for the control period under paragraph (C)(1)(a) of this rule so that the total number of NOx allowances allocated equals ninety-five per cent of the portion of the state trading program budget under paragraph (A) of this rule covering such units. This adjustment shall be made by multiplying each unit's allocation by ninety-five per cent of the portion of the state trading program budget under paragraph (A) of this rule covering such units,

dividing by the total number of NO_x allowances allocated under paragraph (C)(3)(a) of this rule, and rounding to the nearest whole NO_x allowance as appropriate.

(c) The director shall allocate NO_x allowances to emissions unit B002 at WCI steel (premise number 0278000463) for each control period in an amount equaling 0.10 lb/mmBtu multiplied by the heat input determined under paragraph (C)(1) of this rule, divided by 2,000 lb/ton, and rounded to the nearest whole number of NO_x allowances as appropriate.

(4) For each control period under paragraph (B)(4) of this rule, the director shall allocate NO_x allowances to NO_x budget units under paragraph (C)(1) of rule 3745-14-01 of the Administrative Code that commence operation, or are 3745-14-05 5

projected to commence operation, on or after the following dates: May 1, 1997, for control periods under paragraph (B)(1) of this rule; May 1, 2003, for control periods under paragraph (B)(2) of this rule; and May first of the year five years before the beginning of the group of five years that includes the control period, for control periods under paragraph (B)(3) of this rule. The director shall make the allocations under this paragraph (C)(4) of this rule in accordance with the following procedures:

(a) The director shall establish a new source set-aside for each control period. Each new source set-aside shall be allocated NO_x allowances equal to five per cent of the total state trading program budget under paragraph (A) of this rule, rounded to the nearest whole number of NO_x allowances as appropriate.

(b) The NO_x authorized account representative of a NO_x budget unit specified in paragraph (C)(4) of this rule may submit to the director a request, in a format specified by the director, to be allocated NO_x allowances for the control period. The NO_x allowance allocation request shall be submitted to the director on or after the date on which the director issues a permit to construct the unit and by January first before the control period for which the NO_x allowances are requested.

(c) In a NO_x allowance allocation request under paragraph (C)(4)(b) of this rule, the NO_x authorized account representative for a NO_x budget unit under paragraph (C)(1)(a) of rule 3745-14-01 of the Administrative Code may request for a control period NO_x allowances in an amount that does not exceed the lesser of:

(i) 0.15 lb/mmBtu multiplied by the unit's maximum design heat input, multiplied by the lesser of three thousand six hundred seventy two hours or the number of hours remaining in the control period starting with the day in the control period on which the unit commences operation or is projected to commence operation, divided by 2,000 lb/ton, and rounded to the nearest whole number of NO_x allowances as appropriate; or

(ii) The unit's most stringent state or federal NO_x emission limitation multiplied by the unit's maximum design heat input, multiplied by the lesser of three thousand six hundred seventy two hours or the

number of hours remaining in the control period starting with the day in the control period on which the unit commences operation or is projected to commence operation, divided by 2,000 lb/ton, and rounded to the nearest whole number of NOx allowances as appropriate.

3745-14-05 6

(d) In a NOx allowance allocation request under paragraph (C)(4)(b) of this rule, the NOx authorized account representative for a NOx budget unit under paragraph (C)(1)(b) of rule 3745-14-01 of the Administrative Code may request for a control period NOx allowances in an amount that does not exceed the lesser of:

(i) 0.17 lb/mmBtu multiplied by the unit's maximum design heat input, multiplied by the lesser of three thousand six hundred seventy two hours or the number of hours remaining in the control period starting with the day in the control period on which the unit commences operation or is projected to commence operation, divided by 2,000 lb/ton, and rounded to the nearest whole number of NOx allowances as appropriate; or

(ii) The unit's most stringent state or federal NOx emission limitation multiplied by the unit's maximum design heat input, multiplied by the lesser of three thousand six hundred seventy two hours or the number of hours remaining in the control period starting with the day in the control period on which the unit commences operation or is projected to commence operation, divided by 2,000 lb/ton, and rounded to the nearest whole number of NOx allowances as appropriate.

(e) The director shall review each NOx allowance allocation request submitted in accordance with paragraph (C)(4)(b) of this rule and shall allocate NOx allowances pursuant to such request as follows:

(i) Upon receipt of the NOx allowance allocation request, the director shall make any necessary adjustments to the request to ensure that the requirements of paragraphs (C)(4), (C)(4)(b), (C)(4)(c), and (C)(4)(d) of this rule are met.

(ii) The director shall determine the following amounts:

(a) The sum of the NOx allowances requested (as adjusted under paragraph (C)(4)(e)(i) of this rule) in all NOx allowance allocation requests under paragraph (C)(4)(b) of this rule for the control period; and

(b) For units exempt under paragraph (C)(2) of rule 3745-14-01 of the Administrative Code that commenced operation, or are projected to commence operation, on or after May 1, 1997, for control periods under paragraph (B)(1) of this rule; May 1, 2003, for control periods under paragraph (B)(2) of this rule; and May first of the year five years before beginning of the group of five years that includes the control period for control periods under paragraph (B)(3) of

3745-14-05 7

this rule, the sum of the NOx emission limitations (in tons of NOx) on which each unit's exemption under paragraph (C)(2) of rule 3745-14-01 of the Administrative Code is based.

(iii) If the number of NOx allowances in the new source set-aside, under paragraph (C)(4)(a) of this rule, for the control period less the amount under paragraph (C)(4)(e)(ii)(b) of this rule is not less than the amount determined under paragraph (C)(4)(e)(ii)(a) of this rule, the director shall allocate the amount of the NOx allowances requested (as adjusted under paragraph (C)(4)(e)(i) of this rule) to the NOx budget unit for which the allocation request was submitted.

(iv) If the number of NOx allowances in the new source set-aside, under paragraph (C)(4)(a) of this rule, for the control period less the amount under paragraph (C)(4)(e)(ii)(b) of this rule is less than the amount determined under paragraph (C)(4)(e)(ii)(a) of this rule, the director shall allocate, to the NOx budget unit for which the allocation request was submitted, the amount of NOx allowances requested (as adjusted under paragraph (C)(4)(e)(i) of this rule) multiplied by the number of NOx allowances in the new source set-aside for the control period less the amount determined under paragraph (C)(4)(e)(ii)(b) of this rule, divided by the amount determined under paragraph (C)(4)(e)(ii)(a) of this rule, and rounded to the nearest whole number of NOx allowances as appropriate.

(f) By April first of the year for which the request for allocations from the new unit allocation set-aside was made under paragraph (C)(4)(b) of this rule, the director shall take appropriate action under paragraph (C)(4)(e) of this rule and notify the NOx authorized account representative that submitted the request and the administrator of the number of NOx allowances allocated for the control period to the NOx budget unit.

(5) For a NOx budget unit that is allocated NOx allowances under paragraph (C)(4) of this rule for a control period, the Administrator shall deduct NOx allowances under paragraph (E)(2) or (E)(5) of rule 3745-14-06 of the 3745-14-05 8

Administrative Code to account for the actual utilization of the unit during the control period. The administrator shall calculate the number of NOx allowances to be deducted to account for the unit's actual utilization using the following formulas and rounding to the nearest whole NOx allowance as appropriate, provided that the number of NOx allowances to be deducted shall be zero if the number calculated is less than zero:

(a) NOx allowances deducted for actual utilization for units under paragraph (C)(1)(a) of rule 3745-14-01 of the Administrative Code equals the unit's NOx allowances allocated for the control period minus the unit's actual control period utilization multiplied by the lesser of 0.15 lb/mmBtu or the unit's most stringent state or federal NOx emission

limitation, divided by 2000 lb/ton, rounded to the nearest whole NOx allowance as appropriate.

(b) NOx allowances deducted for actual utilization for units under paragraph (C)(1)(b) of rule 3745-14-01 of the Administrative Code equals the unit's NOx allowances allocated for the control period minus the unit's actual control period utilization multiplied by 0.17 lb/mmBtu, divided by 2000 lb/ton, rounded to the nearest whole NOx allowance as appropriate.

Where:

"unit's NOx allowances allocated for control period" is the number of NOx allowances allocated to the unit for the control period under paragraph (C)(4) of this rule; and

"unit's actual control period utilization" is the utilization (in mmBtu), as defined in paragraph (B) of rule 3745-14-01 of the Administrative Code, of the unit during the control period.

(6) After making the deductions for compliance under paragraph (E)(2), (E)(5) or (E)(6) of rule 3745-14-06 of the Administrative Code for a control period, the administrator shall notify the director whether any NOx allowances remain in the new unit allocation set-aside for the control period. The director shall allocate any such NOx allowances to the NOx budget units in the state using the following formula and rounding to the nearest whole NOx allowance as appropriate:

(unit's share of NOx allowances remaining in the new unit allocation set-aside) = (total NOx allowances remaining in new unit allocation set-aside) x (unit's NOx allowance allocation) / (state trading program budget excluding the new unit allocation set-aside)

3745-14-05 9

where:

"total NOx allowances remaining in new unit allocation set-aside" is the total number of NOx allowances remaining in the new unit allocation set-aside for the control period;

"unit's NOx allowance allocation" is the number of NOx allowances allocated under paragraph (C)(2) or (C)(3) of this rule to the unit for the control period to which the new unit allocation set-aside applies; and

"state trading program budget excluding new unit allocation set-aside" is the state's trading program budget under paragraph (A) of this rule for the control period to which the new unit allocation set-aside applies multiplied by ninety-five per cent rounded to the nearest whole NOx allowance as appropriate.

(7) The director shall establish an allocation set-aside for each control period beginning in 2006 for energy efficiency/renewable energy projects. Each energy efficiency/renewable energy project set-aside shall be allocated NOx allowances equal to one per cent of the tons of NOx emissions in the state trading program budget under paragraph (A) of this rule as applicable to units identified by paragraph (C)(1)(a) of rule 3745-14-01 of the Administrative Code, rounded to the nearest whole NOx allowance as appropriate.

(a) Applicants may submit a proposal to the director for an energy

efficiency/renewable energy project and request allocations from the energy efficiency/renewable energy project set-aside for energy reductions obtained as a result of the project. The director shall review proposals based on criteria determined by the director, and notify applicants of approved projects. Proposals must contain the following:

- (i) A detailed description of the project; and
- (ii) An estimate of the number of allocations that will be requested.
- (b) To receive allocations for the energy efficiency/renewable energy projects approved by the director, the applicant must submit a completed project report that verifies that the project was completed as proposed and that proposed energy reductions were obtained.
- (c) Upon verification of the project's success, the director shall award the required allocations to the applicant.

3745-14-05 10

(d) Allocations shall be awarded on an annual basis and for no more than five consecutive years for each approved energy efficiency/renewable energy project.

(8) The director shall establish an allocation set-aside for each control period beginning in 2006 for innovative technology projects. Each innovative technology project set-aside shall be allocated NOx allowances equal to one per cent of the tons of NOx emissions in the state trading program budget under paragraph (A) of this rule as applicable to units identified by paragraph (C)(1)(a) of rule 3745-14-01 of the Administrative Code, rounded to the nearest whole NOx allowance as appropriate.

(a) Applicants may submit a proposal to the director for an innovative technology project and request allocations from the innovative technology project set-aside for NOx reductions or energy reductions obtained. The director shall review proposals based on criteria determined by the director, and notify applicants of approved projects. Proposals must contain the following:

- (i) A detailed description of the project; and
- (ii) An estimate of the number of allocations that will be requested.
- (b) To receive allocations for the innovative technology projects approved by the director, the applicant shall submit a completed project report that verifies that the project was completed as proposed and that proposed NOx reductions or energy reductions were obtained.
- (c) Upon verification of the project's success, the director shall award the required allocations to the applicant.

(d) Allocations shall be awarded on an annual basis and for no more than five consecutive years for each approved innovative technology project.

(9) Allowances remaining at the end of each year in the energy efficiency/renewable energy allocation set-aside or in the innovative technology project allocation set-aside, shall be allocated to NOx budget units under paragraph (C)(1)(a) of rule 3745-14-01 of the Administrative Code in the following year, prorated on the basis of each unit's previous year allocations.

3745-14-05 11

(D) Early reduction credit. The owner or operator of a NOx budget unit may request early reduction credit for NOx emission rate reductions made in the unit during the 2001, 2002 or 2003 control periods. The director may allocate NOx allowances, to be used in 2004 and 2005, to the unit in accordance with the following requirements:

(1) Each NOx budget unit for which the owner or operator requests any early reduction credit under this rule shall monitor and report NOx emissions in accordance with rule 3745-14-08 of the Administrative Code starting in the 2000 control period and for each control period for which such early reduction credit is requested. The unit's per cent monitor data availability shall be not less than ninety per cent during the 2000 control period, and the unit shall be in compliance with any applicable state or federal emission control requirements during 2000 through 2003.

(2) The NOx emission rate and heat input under paragraphs (D)(3) and (D)(4) of this rule shall be determined in accordance with rule 3745-14-08 of the Administrative Code.

(3) Each NOx budget unit for which the owner or operator requests early reduction credit under paragraph (D)(4) of this rule shall reduce its NOx emission rate for each control period for which early reduction credit is requested to less than eighty per cent of the unit's NOx emission rate in the 2000 control period. Early reduction credits shall not be earned for NOx reductions required under the state implementation plan or otherwise required under any provision of the Clean Air Act.

(4) The NOx authorized account representative of a NOx budget unit that meets the requirements of paragraphs (D)(1) and (D)(3) of this rule may submit to the director a request for early reduction credit based on NOx emission rate reductions for the unit in any or all of the control periods in 2001, 2002 or 2003.

(a) The NOx authorized account representative may request early reduction credit for NOx reductions made in the 2001, 2002 or 2003 control periods in the amount equal to the following: the unit's heat input for such control period multiplied by the difference between the unit's NOx emission rate (in lb/mmBtu) during the 2000 control period and the NOx emission rate (in lb/mmBtu) for each control period for which early reduction credits are requested, divided by 2000 lbs/ton and rounded to the nearest whole number of tons as appropriate.

(b) Requests for early reduction credit for reductions made in 2001 and 2002 3745-14-05 12

shall be submitted, in a format specified by the director, by February 1, 2003; and for reductions made in 2003, by February 1, 2004.

(5) The director shall allocate NOx allowances, to NOx budget units meeting the requirements of paragraphs (D)(1) to (D)(3) of this rule and covered by early reduction credit requests meeting the requirements of paragraph (D)(4)(b) of this rule, in accordance with the following procedures:

(a) Upon receipt of such early reduction credit requests, the director shall make any necessary adjustments to the request to ensure that the amount of the early reduction credit requested meets the requirement of paragraphs (D)(1) to (D)(4) of this rule.

(b) If the combined number of early reduction credit in all accepted early reduction credit requests for 2001 and 2002 is not greater than eleven thousand one hundred and fifty one, and the early reduction credit in all accepted early reduction credit requests for 2003 is not greater than eleven thousand one hundred and fifty, the director shall allocate to each NOx budget unit covered by such accepted requests one allowance for each early reduction credit requested.

(c) If the combined number of early reduction credit in all accepted early reduction credit requests for 2001 and 2002 is greater than eleven thousand one hundred and fifty one, or the early reduction credit in all accepted early reduction credit requests for 2003 is greater than eleven thousand one hundred and fifty, the director shall allocate NOx allowances to each NOx budget unit covered by such requests according to the following formula and rounded to the nearest whole number of NOx allowances as appropriate:

$$(\text{unit's allocated early reduction credit}) = (\text{unit's adjusted early reduction credit}) \times (A) / (\text{total adjusted early reduction credit requested by all units})$$

Where:

A = 11,151 for early reduction credit request made for early reductions made in 2001 and 2002; and 11,150 for early reduction credit requests for early reductions made in 2003;

"unit's adjusted early reduction credit" means the number of early reduction credit for the unit for the combined years 2001 and 2002, or 2003 in accepted early reduction credit requests, as adjusted under paragraph (D)(5)(a) of this rule;

3745-14-05 13

"total adjusted early reduction credit requested by all units" means the number of early reduction credit for all units for the combined years 2001 and 2002, or 2003 in accepted early reduction credit requests, as adjusted under paragraph (D)(5)(a) of this rule.

(6) The director shall notify the NOx authorized account representatives who requested early reduction credit according to paragraph (D)(4) of this rule the amount of early reduction credit the administrator will record as NOx allowances for early reductions made during the control periods in 2001, 2002 and 2003 by the following dates:

(a) April 1, 2003, for NOx emission rate reductions made during the 2001 and 2002 control periods; and

(b) April 1, 2004, for NOx emission rate reductions made during the 2003 control period.

(7) The director shall submit to the administrator the NOx allowance allocations determined in accordance with paragraph (D)(5) of this rule by the following dates:

(a) By May 1, 2003, for NOx emission reductions made during the 2001 and 2002 control periods;

(b) By May 1, 2004, for NOx emission reductions made during the 2003 control period.

(8) NOx allowances recorded under paragraph (D)(7) of this rule may be deducted for compliance under paragraph (E) of rule 3745-14-06 of the Administrative Code for the control periods in 2004 and 2005. Notwithstanding paragraph (F)(1)(a) of rule 3745-14-06 of the Administrative Code, the administrator shall deduct, as retired, any NOx allowance that is recorded under paragraph (D)(7) of this rule and is not deducted for compliance in accordance with paragraph (E) of rule 3745-14-06 of the Administrative Code for the control periods in 2004 and 2005.

(9) NOx allowances recorded under paragraph (D)(7) of this rule are treated as banked allowances in 2004 and 2005 for the purposes of paragraph (F)(1)(b) of rule 3745-14-06 of the Administrative Code.

(10) The total number of NOx allowances available for early reduction credit shall be twenty two thousand three hundred and one. Of this amount, eleven
3745-14-05 14

thousand one hundred and fifty one NOx allowances shall be available as early reduction credit for reductions made in the control periods in 2001 and 2002, and eleven thousand one hundred and fifty NOx allowances shall be available as early reduction credit for reductions made in the control period in 2003. NOx allowances available for reductions made in the 2001 and 2002 control periods that are not allocated by the director in accordance with paragraph (D)(5) of this rule shall be available for reductions made during the control period in 2003. NOx allowances available for reductions made in the 2001, 2002 and 2003 control periods that are not allocated or recorded by the director in accordance with paragraph (D)(5) of this rule shall be retired.

3745-14-05 15

Effective: 05/25/2004

R.C. 119.032 review dates: 03/31/2005

CERTIFIED ELECTRONICALLY

Certification

05/14/2004

Date

Promulgated Under: 119.03

Statutory Authority: 3704.03(E)

Rule Amplifies: 3704.03 (A), (D) and (E)

Prior Effective Dates: 6/21/1994, 7/18/2002

3745-14-05 16

Appendix A to Chapter 3745-14

Annual NOx allowance allocations to regulated electrical generating units for each year from 2004 through 2007

Plant Plant

ID

Point ID

NOx allocations

2004 and 2005 2006 and 2007

Ashtabula 2835 7 333 326

Ashtabula 2835 8 70 69

Ashtabula 2835 9 66 65

Ashtabula 2835 10 75 73

Ashtabula 2835 11 80 78
Avon Lake 2836 9 41 40
Avon Lake 2836 10 139 136
Avon Lake 2836 12 1,040 1,018
Avon Lake 2836 CT10 3 3
Bay Shore 2878 1 208 204
Bay Shore 2878 2 229 224
Bay Shore 2878 3 213 209
Bay Shore 2878 4 330 323
Cardinal 2828 1 1,030 1,008
Cardinal 2828 2 1,083 1,060
Cardinal 2828 3 1,079 1,056
Conesville 2840 1 214 209
Conesville 2840 2 203 199
Conesville 2840 3 212 208
Conesville 2840 4 1,119 1,095
Conesville 2840 5 731 716
Conesville 2840 6 736 721
Dicks Creek 2831 1 7 7
Eastlake 2837 1 214 209
Eastlake 2837 2 230 225
Eastlake 2837 3 251 246
Eastlake 2837 4 371 363
Eastlake 2837 5 974 953
Eastlake 2837 6 1 1
Edge Water 2857 13 65 64
Edge Water 2857 A 1 1
Edge Water 2857 B 1 1
Frank M . Tait 2847 GT1 23 23
Frank M .Tait 2847 GT2 25 24
General J. M . Gavin 8102 1 2,744 2,686
General J. M . Gavin 8102 2 2,981 2,918
Hamilton 2917 9 110 108
J. M. Stuart 2850 1 1,054 1,032
J. M. Stuart 2850 2 1,228 1,202
J. M. Stuart 2850 3 1,074 1,051
J. M. Stuart 2850 4 1,106 1,083
Killen Station 6031 2 1,706 1,670
Kyger Creek 2876 1 471 461
Kyger Creek 2876 2 471 461
Kyger Creek 2876 3 478 468
Kyger Creek 2876 4 465 455
Kyger Creek 2876 5 455 445
Lake Shore 2838 18 195 191
Mad River 2860 A 2 2
Mad River 2860 B 2 2
Miami Fort 2832 5-1 35 34
Miami Fort 2832 5-2 35 34
Miami Fort 2832 6 398 390
Miami Fort 2832 7 1,044 1,022
Miami Fort 2832 8 1,015 994
Miami Fort 2832 CT2 1 1
Muskingum River 2872 1 309 302
Muskingum River 2872 2 316 309
Muskingum River 2872 3 347 340
Muskingum River 2872 4 349 342
Muskingum River 2872 5 1,105 1,082
Niles 2861 1 212 208
Niles 2861 2 160 157
Niles 2861 A 2 2
O. H. Hutchings 2848 H-1 24 23
O. H. Hutchings 2848 H-2 37 36

O. H. Hutchings 2848 H-3 64 63
O. H. Hutchings 2848 H-4 68 67
O. H. Hutchings 2848 H-5 62 61
O. H. Hutchings 2848 H-6 69 68
O. H. Hutchings 2848 H-7 1 1
Picway 2843 9 141 138
R. E. Burger 2864 1 0 0
R. E. Burger 2864 2 0 0
R. E. Burger 2864 3 0 0
R. E. Burger 2864 4 0 0
R. E. Burger 2864 5 14 14
R. E. Burger 2864 6 13 13
R. E. Burger 2864 7 337 330
R. E. Burger 2864 8 274 268
Richard Gorsuch 7286 1 146 143
Richard Gorsuch 7286 2 138 135
Richard Gorsuch 7286 3 144 141
Richard Gorsuch 7286 4 146 143
W. H. Sammis 2866 1 402 394
W. H. Sammis 2866 2 418 409
W. H. Sammis 2866 3 400 392
W. H. Sammis 2866 4 415 406
W. H. Sammis 2866 5 631 618
W. H. Sammis 2866 6 1,221 1,195
W. H. Sammis 2866 7 1,259 1,232
W. H. Zimmer 6019 1 2,918 2,857
Walter C. Beckjord 2830 1 167 163
Walter C. Beckjord 2830 2 198 194
Walter C. Beckjord 2830 3 281 275
Walter C. Beckjord 2830 4 347 340
Walter C. Beckjord 2830 5 481 471
Walter C. Beckjord 2830 6 850 832
Walter C. Beckjord 2830 CT1 3 3
Walter C. Beckjord 2830 CT2 3 3
Walter C. Beckjord 2830 CT3 4 4
Walter C. Beckjord 2830 CT4 2 2
West Lorain 2869 1A 0 0
West Lorain 2869 1B 0 0
Woodsdale 7158 GT1 30 29
Woodsdale 7158 GT2 30 29
Woodsdale 7158 GT3 39 38
Woodsdale 7158 GT4 37 36
Woodsdale 7158 GT5 40 39
Woodsdale 7158 GT6 39 38
Total 43,160 42,251

Appendix B to Chapter 3745-14:

Annual NOx allowance allocations for the ozone season in years 2004 through 2007 for regulated non-electrical generating units

Plant County Plant ID Point ID NOx allocation

AK Steel Butler 1409010006 P009 66

AK Steel Butler 1409010006 P010 66

AK Steel Butler 1409010006 P011 66

AK Steel Butler 1409010006 P012 66

Biomass Energy Lawrence 0744000009 B003 106

Biomass Energy Lawrence 0744000009 B004 106

Biomass Energy Lawrence 0744000009 B007 106

BP Oil, Toledo

Chillicothe Paper Inc.

PTI Application: 06-07700

Issued: 7/14/2005

Facility ID: 067101002

Refinery

Lucas 0448020007 B004 39

BP Oil, Toledo

Refinery

Lucas 0448020007 B020 101

Cargill Montgomery 0857041124 B004 131

Cargill Montgomery 0857041124 B006 1

Cognis Hamilton 1431070035 B027 206

Goodyear Tire &

Rubber

Summit 1677010193 B001 100

Goodyear Tire &

Rubber

Summit 1677010193 B002 106

LTV Steel Company Cuyahoga 1318001613 B001 137

LTV Steel Company Cuyahoga 1318001613 B002 148

LTV Steel Company Cuyahoga 1318001613 B003 157

LTV Steel Company Cuyahoga 1318001613 B004 156

LTV Steel Company Cuyahoga 1318001613 B007 153

LTV Steel Company Cuyahoga 1318001613 B905 14

Mead Ross 0671010028 B001 182

Mead Ross 0671010028 B002 205

Mead Ross 0671010028 B003 248

New Boston Coke

Corp.

Scioto 0773010004 B008 20

New Boston Coke

Corp.

Scioto 0773010004 B009 15

Premcor Refinery Allen 0302020012 B009 16

Procter & Gamble Hamilton 1431390903 B021 71

Procter & Gamble Hamilton 1431390903 B022 292

Republic Engineered

Steels

Lorain 0247080229 B013 157

Smart Papers Butler 1409040212 B010 264

Sun Oil, Toledo

Refinery

Lucas 0448010246 B044 47

Sun Oil, Toledo

Refinery

Lucas 0448010246 B046 34

Sun Oil, Toledo

Refinery

Lucas 0448010246 B047 18

W CI Steel Trumbull 0278000463 B001 111

W CI Steel Trumbull 0278000463 B002 29

W CI Steel Trumbull 0278000463 B004 140

Total

3,864

3,828

3745-14-06 The NOx allowance tracking system.

(A) NOx allowance tracking system accounts.

(1) Consistent with paragraph (B)(1) of this rule, the administrator shall establish one compliance account for each NOx budget unit and one overdraft account for each source with two or more NOx budget units. Allocations of NOx allowances pursuant to rule 3745-14-05 or 3745-14-09 of the Administrative Code and deductions or transfers of NOx allowances pursuant to paragraphs (E) and (G) of this rule, paragraph (B) of rule 3745-14-04, and rules 3745-14-07 and 3745-14-09 of the Administrative Code shall be recorded in the compliance accounts or overdraft accounts in accordance with this rule.

(2) Consistent with paragraph (B)(2) of this rule, the administrator shall establish, upon request, a general account for any person. Transfers of allowances pursuant to rule 3745-14-07 of the Administrative Code shall be recorded in the general account in accordance with this rule.

(B) Establishment of accounts.

(1) Upon receipt of a complete account certificate of representation, the administrator shall establish:

(a) A compliance account for each NOx budget unit for which the account certificate of representation was submitted; and

(b) An overdraft account for each source for which the account certificate of representation was submitted and that has two or more NOx budget units.

(2) General accounts.

(a) Any person may apply to open a general account for the purpose of holding and transferring allowances. An application for a general account may designate one and only one NOx authorized account representative and one and only one alternate NOx authorized account representative who may act on behalf of the NOx authorized account representative. The agreement by which the alternate NOx authorized account representative is selected shall include a procedure for authorizing the alternate NOx authorized account representative to act in lieu of the NOx authorized account representative. A complete application for a general account shall be submitted to the administrator and shall include the following elements in a format prescribed by the

[stylesheet: rule.xml 2.14, authoring tool: i4i 2.0 Apr 9, 2003, (dv: 10, p: 11394, pa: 15426, ra: 53044, d: 47330)] print date: 11/12/2003 01:12 PM

ACTION: Final DATE: 11/12/2003 1:03 PM

administrator:

(i) Name, mailing address, e-mail address (if any), telephone number, and facsimile transmission number (if any) of the NOx authorized account representative and any alternate NOx authorized account representative;

(ii) At the option of the NOx authorized account representative,

organization name and type of organization;

(iii) A list of all persons subject to a binding agreement for the NOx authorized account representative or any alternate NOx

authorized account representative to represent their ownership interest with respect to the allowances held in the general account;

(iv) The following certification statement by the NOx authorized account representative and any alternate NOx authorized account representative:

"I certify that I was selected as the NOx authorized account representative or the NOx alternate authorized account representative, as applicable, by an agreement that is binding on all persons who have an ownership interest with respect to NOx allowances held in the general account. I certify that I have all the necessary authority to carry out my duties and responsibilities under the NOx budget trading program on behalf of such persons and that each such person shall be fully bound by my representations, actions, inactions, or submissions and by any order or decision issued to me by the Administrator or a court regarding the general account."

(v) The signature of the NOx authorized account representative and any alternate NOx authorized account representative and the dates signed.

Unless otherwise required by the director or the administrator, documents of agreement referred to in the account certificate of representation shall not be submitted to the director or the administrator. Neither the director nor the administrator shall be under any obligation to review or evaluate the sufficiency of such documents, if submitted.

(b) Upon receipt by the administrator of a complete application for a general
3745-14-06 2

account under paragraph (B)(2)(a) of this rule:

(i) The administrator shall establish a general account for the person or persons for whom the application is submitted.

(ii) The NOx authorized account representative and any alternate NOx authorized account representative for the general account shall represent and, by his or her representations, actions, inactions, or submissions, legally bind each person who has an ownership interest with respect to NOx allowances held in the general account in all matters pertaining to the NOx budget trading program, notwithstanding any agreement between the NOx authorized account representative or any alternate NOx authorized account representative and such person. Any such person shall be bound by any order or decision issued to the NOx authorized account representative or any alternate NOx authorized account representative by the administrator or a court regarding the general account.

(iii) Any representation, action, inaction or submission by an alternate

NOx authorized account representative shall be deemed to be a representation, action, inaction or submission by the NOx authorized account representative.

(iv) Each submission concerning the general account shall be submitted, signed, and certified by the NOx authorized account representative or any alternate NOx authorized account representative for the persons having an ownership interest with respect to NOx allowances held in the general account. Each such submission shall include the following certification statement by the NOx authorized account representative or any alternate NOx authorized account representative:

"I am authorized to make this submission on behalf of the persons having an ownership interest with respect to the NOx allowances held in the general account. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, 3745-14-06 3

including the possibility of fine or imprisonment."

(v) The administrator shall accept or act on a submission concerning the general account only if the submission has been made, signed, and certified in accordance with paragraph (B)(2)(b)(iv) of this rule.

(c) Change of NOx authorized account representative or alternate NOx authorized account representative.

(i) The NOx authorized account representative for a general account may be changed at any time upon receipt by the administrator of a superseding complete application for a general account under paragraph (B)(2)(b) of this rule. Notwithstanding any such change, all representations, actions, inactions, and submissions by the previous NOx authorized account representative prior to the time and date when the administrator receives the superseding application for a general account shall be binding on the new NOx authorized account representative and the persons with an ownership interest with respect to the allowances in the general account.

(ii) The alternate NOx authorized account representative for a general account may be changed at any time upon receipt by the administrator of a superseding complete application for a general account under paragraph (B)(2)(b) of this rule. Notwithstanding any such change, all representations, actions, inactions, and submissions by the previous alternate NOx authorized account

representative prior to the time and date when the administrator receives the superseding application for a general account shall be binding on the new alternate NOx authorized account representative and the persons with an ownership interest with respect to the allowances in the general account.

(d) Change in owners.

(i) In the event a new person having an ownership interest with respect to NOx allowances in the general account is not included in the list of such persons in the account certificate of representation, such new person shall be deemed to be subject to and bound by the account certificate of representation, the representation, actions, inactions, and submissions of the NOx authorized account representative and any alternate NOx authorized account representative and any alternate NOx authorized account representative of the source or unit, and the decisions, orders, actions, and inactions of the administrator, as if the new person were included in such list.

(ii) Within thirty days following any change in the persons having an ownership interest with respect to NOx allowances in the general account, including the addition of persons, the NOx authorized account representative or any alternate NOx authorized account representative shall submit a revision to the application for a general account amending the list of persons having an ownership interest with respect to the NOx allowances in the general account to include the change.

(e) Administrator's reliance on general account application.

(i) Once a complete application for a general account has been submitted and received, the administrator shall rely on the application unless and until a superseding complete application for a general account is received by the administrator.

(ii) Except as provided in paragraph (B)(2)(d) of this rule, no objection or other communication submitted to the administrator concerning the authorization, or any representation, action, inaction, or submission of the NOx authorized account representative or any alternate NOx authorized account representative for a general account shall affect any representation, action, inaction, or submission of the NOx authorized account representative or any alternate NOx authorized account representative or the finality of any decision or order by the administrator under the NOx budget trading program.

(iii) The administrator shall not adjudicate any private legal dispute concerning the authorization or any representation, action, inaction, or submission of the NOx authorized account representative or any alternate NOx authorized account representative for a general account, including private legal disputes concerning the proceeds of NOx allowance transfers.

(3) The administrator shall assign a unique identifying number to each account established under paragraph (B)(1) or (B)(2) of this rule.

(C) NOx allowance tracking system responsibilities of the NOx authorized account 3745-14-06 5 representative.

(1) Following the establishment of a NOx allowance tracking system account, all submissions to the administrator pertaining to the account, including, but not limited to, submissions concerning the deduction or transfer of NOx allowances in the account, shall be made only by the NOx authorized account representative for the account.

(2) The administrator shall assign a unique identifying number to each NOx authorized account representative.

(D) Recording NOx allowance allocations.

(1) The administrator shall record the NOx allowances for 2004 in the NOx budget units' compliance accounts and the allocation set-asides, as allocated under rule 3745-14-05 of this chapter. The administrator shall also record the NOx allowances allocated under paragraph (I)(1)(a) of rule 3745-14-09 of the Administrative Code for each NOx budget opt-in unit in its compliance account.

(2) Each year, after the administrator has made all deductions from a NOx budget unit's compliance account and the overdraft account pursuant to paragraph (E) of rule 3745-14-06 of the Administrative Code, the administrator shall record NOx allowances, as allocated to the unit under rule 3745-14-05 of the Administrative Code or paragraph (I)(1)(b) of rule 3745-14-09 of the Administrative Code, in the compliance account for the year after the last year for which allowances were previously allocated to the compliance account. Each year, the administrator shall also record NOx allowances, as allocated under rule 3745-14-05 of the Administrative Code, in the allocation set-aside for the year after the last year for which allowances were previously allocated to an allocation set-aside.

(3) When allocating NOx allowances to and recording them in an account, the administrator shall assign each NOx allowance a unique identification number that shall include digits identifying the year for which the NOx allowance is allocated.

(E) Compliance.

(1) The NOx allowances are available to be deducted for compliance with a unit's NOx budget emissions limitation for a control period in a given year only if the NOx allowances:

3745-14-06 6

(a) Were allocated for a control period in a prior year or the same year; and

(b) Are held in the unit's compliance account, or the overdraft account of the source where the unit is located, as of the NOx allowance transfer deadline for that control period or are transferred into the compliance account or overdraft account by a NOx allowance transfer correctly submitted for recording under paragraph (A) of rule 3745-14-07 of the Administrative Code by the NOx allowance transfer deadline for that control period.

(2) Deductions for compliance.

(a) Following the recording, in accordance with paragraph (B) of rule 3745-14-07 of the Administrative Code, of NOx allowance transfers submitted for recording in the unit's compliance account or the overdraft account of the source where the unit is located by the NOx allowance transfer deadline for a control period, the administrator shall deduct NOx allowances available under paragraph (E)(1) of this rule to cover the unit's NOx emissions, as determined in accordance with rule 3745-14-08 of the Administrative Code, or to account for actual utilization under paragraph (C)(5) of rule 3745-14-05 of the Administrative Code, for the control period as follows:

(i) From the compliance account; and

(ii) Only if no more NOx allowances available under paragraph (E)(1) of this rule remain in the compliance account, from the overdraft account. [In deducting allowances for units at the source from the overdraft account, the administrator shall begin with the unit having the compliance account with the lowest NOx allowance tracking system account number and end with the unit having the compliance account with the highest NOx allowance tracking system account number. Account numbers shall be sorted beginning with the leftmost character and ending with the rightmost character and the letter characters assigned values in alphabetical order and less than all numeric characters.]

(b) The administrator shall deduct NOx allowances first under paragraph (E)(2)(a)(i) of this rule and then under paragraph (E)(2)(a)(ii) of this rule:

(i) Until the number of NOx allowances deducted for the control period 3745-14-06 7

equals the number of tons of NOx emissions, determined in accordance with rule 3745-14-08 of the Administrative Code, from the unit for the control period for which compliance is being determined, plus the number of NOx allowances required for deduction to account for actual utilization under paragraph (C)(5) of rule 3745-14-05 of the Administrative Code for the control period; or

(ii) Until no more NOx allowances available under paragraph (E)(1) of this rule remain in the respective account.

(3) Identification of NOx allowances by serial number.

(a) The NOx authorized account representative for each compliance account may identify by serial number the NOx allowances to be deducted from the unit's compliance account under paragraph (E)(2), (E)(4), (E)(5) or (E)(6) of this rule. Such identification shall be made in the compliance certification report submitted in accordance with paragraph (A) of rule 3745-14-04 of the Administrative Code.

(b) The administrator shall deduct NOx allowances for a control period from the compliance account, in the absence of an identification or in the case of a partial identification of NOx allowances by serial number

under paragraph (E)(3)(a) of this rule, or the overdraft account on a first-in-first-out accounting basis in the following order:

- (i) Those NOx allowances that were allocated for the control period to the unit under rule 3745-14-05 or 3745-14-09 of the Administrative Code;
- (ii) Those NOx allowances that were allocated for the control period to any unit and transferred and recorded in the account pursuant to rule 3745-14-07 of the Administrative Code, in order of their recorded date;
- (iii) Those NOx allowances that were allocated for a prior control period to the unit under rule 3745-14-05 or 3745-14-09 of the Administrative Code; and
- (iv) Those NOx allowances that were allocated for a prior control period to any unit and transferred and recorded in the account pursuant to rule 3745-14-07 of the Administrative Code, in order 3745-14-06 8 of their recorded date.

(4) Deductions for excess emissions.

(a) After making the deductions for compliance under paragraph (E)(2) of this rule, the administrator shall deduct from the unit's compliance account or the overdraft account of the source where the unit is located a number of NOx allowances, allocated for a control period after the control period in which the unit has excess emissions, equal to three times the number of the unit's excess emissions.

(b) If the compliance account or overdraft account does not contain sufficient NOx allowances, the administrator shall deduct the required number of NOx allowances (i.e., three times the number of the unit's excess emissions) regardless of the control period for which they were allocated whenever NOx allowances are recorded in either account.

(c) Any allowance deduction required under paragraph (E)(4)(a) or (E)(4)(b) of this rule shall not affect the liability of the owners and operators of the NOx budget unit for any fine, penalty, or assessment, or their obligation to comply with any other remedy, for the same violation, as ordered under the Clean Air Act or applicable state law. The following guidelines shall be followed in assessing fines, penalties or other obligations:

(i) For purposes of determining the number of days of violation, if a NOx budget unit has excess emissions for a control period, each day in the control period constitutes a day in violation unless the owners and operators of the unit demonstrate that a lesser number of days should be considered;

(ii) Each ton of excess emissions is a separate violation.

(5) In the case of units sharing a common stack and having emissions that are not separately monitored or apportioned in accordance with rule 3745-14-08 of the Administrative Code:

(a) The NOx authorized account representative of the units may identify the percentage of NOx allowances to be deducted from each such unit's

compliance account to cover the unit's share of NOx emissions from the common stack for a control period. Such identification shall be made in the compliance certification report submitted in accordance with 3745-14-06 9

paragraph (A) of rule 3745-14-04 of the Administrative Code.

(b) Notwithstanding paragraph (E)(2)(b)(i) of this rule, the administrator shall deduct NOx allowances for each such unit until the number of NOx allowances deducted equals the unit's identified percentage, under paragraph (E)(5)(a) of this rule, of the number of tons of NOx emissions, as determined in accordance with rule 3745-14-08 of the Administrative Code, from the common stack for the control period for which compliance is being determined or, if no percentage is identified, an equal percentage for each such unit, plus the number of allowances required for deduction to account for actual utilization under paragraph (C)(5) of rule 3745-14-05 of the Administrative Code for the control period.

(6) Each year starting in 20062005, after the administrator has completed the designation of banked NOx allowances under paragraph (F)(1)(b) of this rule and before May 1 of the year, the administrator shall determine the extent to which banked NOx allowances otherwise available under paragraph (E)(1) of this rule are available for compliance in the control period for the current year, as follows:

(a) The administrator shall determine the total number of banked NOx allowances held in compliance accounts, overdraft accounts, or general accounts.

(b) If the total number of banked NOx allowances determined to be held in compliance accounts, overdraft accounts, or general accounts is less than or equal to ten per cent of the sum of the state trading program budgets for the control period, any banked NOx allowance may be deducted for compliance in accordance with paragraphs (E)(1) to (E)(5) of this rule.

(c) If the total number of banked NOx allowances determined to be held in compliance accounts, overdraft accounts, or general accounts exceeds ten per cent of the sum of the state trading program budgets for the control period, any banked allowance may be deducted for compliance in accordance with paragraphs (E)(1) to (E)(5) of this rule, except as follows:

(i) The administrator shall determine the following ratio: 0.10 multiplied by the sum of the state trading program budgets for the control period divided by the total number of banked NOx allowances determined to be held in compliance accounts, 3745-14-06 10

overdraft accounts, or general accounts.

(ii) The administrator shall multiply the number of banked NOx allowances in each compliance account or overdraft account by the ratio determined under paragraph (E)(6)(c)(i) of this rule. The resulting product is the number of banked NOx allowances in the

account that may be deducted for compliance in accordance with paragraphs (E)(1) to (E)(5) of this rule. Any banked NOx allowances in excess of the resulting product may be deducted for compliance in accordance with paragraphs (E)(1) to (E)(5) of this rule, except that, if such NOx allowances are used to make a deduction under paragraphs (E)(2) to (E)(5) of this rule, two (rather than one) such NOx allowances shall authorize one ton of NOx emissions during the control period and must be deducted for each deduction of one NOx allowance required under paragraph (E)(2) to (E)(5) of this rule.

(7) The administrator shall record in the appropriate compliance account or overdraft account all deductions from such an account pursuant to paragraphs (E)(2), (E)(4), (E)(5) and (E)(6) of this rule.

(F) Banking.

(1) NOx allowances shall be banked for future use or transfer in a compliance account, an overdraft account, or a general account, as follows:

(a) Any NOx allowance that is held in a compliance account, an overdraft account, or a general account shall remain in such account unless and until the NOx allowance is deducted or transferred pursuant to paragraphs (E) and (G) of this rule, paragraph (B) of rule 3745-14-04, and rules 3745-14-07 and 3745-14-09 of the Administrative Code.

(b) The administrator shall designate, as a "banked" NOx allowance, any NOx allowance that remains in a compliance account, an overdraft account, or a general account after the administrator has made all deductions for a given control period from the compliance account or overdraft account pursuant to paragraph (E) of this rule (except deductions pursuant to paragraph (E)(4)(b) of this rule) and that were allocated for that control period or a control period in a prior year.

(G) The administrator may, at his or her sole discretion and on his or her own motion, correct any error in any NOx allowance tracking system account. Within ten business days of making such correction, the administrator shall notify the NOx
3745-14-06 11

authorized account representative for the account.

(H) Closing of general accounts.

(1) The NOx authorized account representative of a general account may instruct the administrator to close the account by submitting a statement requesting deletion of the account from the NOx allowance tracking system and by correctly submitting for recording, under paragraph (A) of rule 3745-14-07 of the Administrative Code, an allowance transfer of all NOx allowances in the account to one or more other NOx allowance tracking system accounts.

(2) If a general account shows no activity for a period of a year or more and does not contain any NOx allowances, the administrator shall notify the NOx authorized account representative for the account that the account will be closed and deleted from the NOx allowance tracking system following twenty business days after the notice is sent. The account shall be closed after the twenty-day period unless, before the end of the twenty-day period, the administrator receives a correctly submitted transfer of NOx allowances into

the account under paragraph (A) of rule 3745-14-07 of the Administrative Code or a statement submitted by the NOx authorized account representative demonstrating to the satisfaction of the administrator good cause as to why the account should not be closed.

3745-14-06 12

Effective: 11/24/2003

R.C. 119.032 review dates: 03/31/2005

CERTIFIED ELECTRONICALLY

Certification

11/12/2003

Date

Promulgated Under: 119.03

Statutory Authority: 3704.03(E)

Rule Amplifies: 3704.03(A), (D) and (E)

Prior Effective Dates: 7/18/2002

3745-14-06 13

3745-14-07 NOx allowance transfers.

(A) Submission of NOx allowance transfers.

(1) The NOx authorized account representatives seeking recording of a NOx allowance transfer shall submit the transfer to the Administrator. To be considered correctly submitted, the NOx allowance transfer shall include the following elements in a format specified by the Administrator:

(a) the numbers identifying both the transferor and transferee accounts;

(b) a specification by serial number of each NOx allowance to be transferred; and

(c) the printed name and signature of the NOx authorized account representative of the transferor account and the date signed.

(B) Recordation of NOx allowance transfer requests.

(1) Within five business days of receiving a NO x allowance transfer, except as provided in paragraph (B)(2) of this rule, the Administrator shall record a NOx allowance transfer by moving each NOx allowance from the transferor account to the transferee account as specified by the request, provided that:

(a) the transfer is correctly submitted under paragraph (A) of this rule; and

(b) the transferor account includes each NOx allowance identified by serial number in the transfer.

(2) A NOx allowance transfer that is submitted for recording following the NOx allowance transfer deadline and that includes any NOx allowances allocated for a control period prior to or the same as the control period to which the NOx allowance transfer deadline applies shall not be recorded until after completion of the process of recording of NOx allowance allocations in paragraph (D) of rule 3745-14-06 of this chapter.

(3) Where a NOx allowance transfer submitted for recording fails to meet the requirements of paragraph

(B)(1) of this rule, the Administrator shall not record such transfer.

(C) Notification of transfers recorded.

(1) Within five business days of recording a NOx allowance transfer under paragraph (B) of this rule, the

Administrator shall notify the NO x authorized account representative of both the transferor and transferee accounts.

(2) Within ten business days of receipt of a NOx allowance transfer that fails to meet the requirements of

paragraph (B)(1) of this rule, the Administrator shall notify the NOx authorized account representatives of both accounts subject to the transfer of:

(a) a decision not to record the transfer, and

(b) the reasons for not recording the transfer.

(3) Nothing in this rule shall preclude the re-submission of a NOx allowance transfer for recording that failed to meet the requirements of paragraph (B)(1) of this rule upon a previous submission.

Effective date: July 18, 2002

R.C. 119.033 Review dates: 03/31/2005

Certified Electronically

07/08/2002 10:08 AM

Promulgated Under: 119.03

Statutory Authority: 3704.03(E)

Rule Amplifies: 3704.03(A), (D), and (E)

Prior Effective Dates: June 21, 1994

3745-14-08 Monitoring and reporting.

(A) General requirements.

(1) The owners and operators, and to the extent applicable, the NOx authorized account representative

of a NO x budget unit, shall comply with the monitoring and reporting requirements as provided in this rule and in subpart H of 40 C.F.R. part 75. For purposes of complying with such requirements, the definitions in paragraph (B) of rule 3745-14-01 and in 40 C.F.R. 72.2 shall apply, and the terms "affected unit," "designated representative," and "continuous emission monitoring system" (or "CEMS") in 40 C.F.R. part 75 shall be replaced by the terms "NOx budget unit," "NOx authorized account representative," and "continuous emission monitoring system" (or "CEM S"), respectively, as defined in paragraph (B) of rule 3745-14-01 of this chapter.

(2) The owner or operator of each NOx budget unit and each unit for which an application for a NOx budget opt-in permit is submitted and not denied or withdrawn, as provided in rule 3745-14-09 of this chapter, shall meet the following requirements:

(a) install all monitoring systems required under this rule for monitoring NOx mass emissions; (This includes all systems required to monitor NOx emission rate, NOx concentration, heat input rate, and stack flow rate, in accordance with 40 C.F.R. 75.71 and 75.72.)

(b) install all monitoring systems for monitoring heat input rate;

(c) successfully complete all certification tests required under paragraph (B) of this rule and meet all other requirements of this rule and 40 C.F.R. part 75 applicable to the monitoring systems under paragraphs (A)(2)(a) and (A)(2)(b) of this rule; and

(d) record, report and quality assure the data from the monitoring systems required under paragraphs (A)(2)(a) and (A)(2)(b) of this rule.

(3) The owner or operator shall meet the certification and other requirements of paragraphs (A)(2)(a) through (A)(2)(c) of this rule on or before the following dates. The owner or operator shall record, report and quality-assure the data from the monitoring systems under paragraphs (A)(2)(a) and (A)(2)(b) of this rule on and after the following dates:

(a) for the owner or operator of a NOx budget unit for which the owner or operator intends to apply for early reduction credit under paragraph (D) of rule 3745-14-05 of this chapter, by May 1, 2000;

(b) for the owner or operator of a NOx budget unit under paragraph (C)(1) of rule 3745-14-01 of this chapter that commences operation before January 1, 2003, and that is not subject to or does not meet the deadline under paragraph (A)(3)(a) of this rule, by May 1, 2003;

(c) for the owner or operator of a NOx budget unit under paragraph (C)(1)(a) of rule 3745-14-01 of this chapter that commences operation on or after January 1, 2003 and that reports on an annual basis under paragraph (E)(4) of this rule, by the later of the following dates;

(i) May 1, 2003; or

(ii) ninety days after the date on which the unit commences commercial operation.

(d) for the owner or operator of a NOx budget unit under paragraph (C)(1)(a) of rule 3745-14-01 of this chapter that commences operation on or after January 1, 2003 and that reports on a control period basis under paragraph (E)(4)(b)(i) of this rule, by no later than ninety days after the date on which the unit commences commercial operation, provided that this date is during a control period; (If this date does not occur during a control period, the applicable deadline is May 1 immediately following this date.)

(e) for the owner or operator of a NOx budget unit under paragraph (C)(1)(b) of rule 3745-14-01 of this chapter that commences operation on or after January 1, 2003 and that reports on an annual basis under paragraph (E)(4) of this rule, by the later of the following dates:

3745-14-09 NOx budget opt-in units.

(A) A unit that is not a NOx budget unit under paragraph (C) of rule 3745-14-01 of this chapter, vents all of

its emissions to a stack, and is operating, may qualify, under this rule, to become a NO x budget opt-in

unit. A unit that is a NOx budget unit under paragraph (C) of rule 3745-14-01 of this chapter, is covered by a retired unit exemption under paragraph (D) of rule 3745-14-01 of this chapter that is in effect, or is not operating is not eligible to become a NOx budget opt-in unit.

(B) Except as otherwise provided in this chapter, a NOx budget opt-in unit shall be treated as a NOx budget

unit for purposes of applying rules 3745-14-01 to 3745-14-08 and 3745-14-10 of this chapter.

(C) A unit for which an application for a NOx budget opt-in permit is submitted and not denied or withdrawn, or a NOx budget opt-in unit, located at the same source as one or more NOx budget units, shall have the same NOx authorized account representative as such NOx budget units.

(D) Applying for a NOx budget opt-in permit.

(1) In order to apply for an initial NOx budget opt-in permit, the NOx authorized account representative of a unit qualified under paragraph (A) of this rule may submit the following to the director at any time, except as provided under paragraph (G)(7) of this rule:

(a) a complete NOx budget permit application under paragraph (C) of rule 3745-14-03 of this chapter;

(b) a monitoring plan submitted in accordance with paragraph (E)(2) of rule 3745-14-08 of this chapter; and

(c) a complete account certificate of representation under paragraph (D) of rule 3745-14-02 of this chapter, if no NOx authorized account representative has been previously designated for the unit.

(2) The NOx authorized account representative of a NOx budget opt-in unit shall submit a complete NOx budget permit application under paragraph (C) of rule 3745-14-03 of this chapter to renew the NOx budget opt-in permit in accordance with paragraph (B)(3) of rule 3745-14-03 of this chapter and, if applicable, an updated monitoring plan in accordance with rule 3745-14-08 of this

chapter.

(E) The director shall issue or deny a NO_x budget opt-in permit for a unit for which an initial application

for a NO_x budget opt-in permit is submitted, in accordance with paragraph (A) of rule 3745-14-03 of this chapter and the following:

(1) The director shall determine, on an interim basis, the sufficiency of the monitoring plan accompanying the initial application for a NO_x budget opt-in permit. A monitoring plan is sufficient, for purposes of interim review, if the plan appears to contain information demonstrating that the NO_x emissions rate and heat input of the unit are monitored and reported in accordance with rule 3745-14-08 of this chapter. A determination of sufficiency shall not be construed as acceptance or approval of the unit's monitoring plan.

(2) If the director determines that the unit's monitoring plan is sufficient under paragraph (E)(1) of this rule and after completion of monitoring system certification under rule 3745-14-08 of this chapter, the NO_x emissions rate and the heat input of the unit shall be monitored and reported in accordance with rule 3745-14-08 of this chapter for one full control period during which per cent monitor data availability is not less than ninety per cent and during which the unit is in full compliance with any applicable state or federal emissions or emission-related requirements.

3745-14-10 Alternative compliance plans.

Nothing in this chapter shall prohibit the owner or operator of a NO_x budget unit from participating in future

programs under federal rules that allow for multi-pollutant reductions in place of the requirements of the rules

of this chapter.

Effective date: July 18, 2002

R.C. 119.033 Review dates: 03/31/2005

Certified Electronically

07/08/2002 10:08 AM

Promulgated Under: 119.03

Statutory Authority: 3704.03(E)

Rule Amplifies: 3704.03(A), (D), and (E)

Prior Effective Dates: June 21, 1994

2. Subpart S—National Emission Standards for Hazardous Air Pollutants from the Pulp and Paper Industry

Source: 63 FR 18617, Apr. 15, 1998, unless otherwise noted.

§ 63.440 Applicability.

(a) The provisions of this subpart apply to the owner or operator of processes that produce pulp, paper, or paperboard; that are located at a plant site that is a major source as defined in §63.2 of subpart A of this part; and that use the following processes and materials:

- (1) Kraft, soda, sulfite, or semi-chemical pulping processes using wood; or
- (2) Mechanical pulping processes using wood; or
- (3) Any process using secondary or non-wood fibers.

(b) The affected source to which the existing source provisions of this subpart apply is as follows:

- (1) For the processes specified in paragraph (a)(1) of this section, the affected source is the total of all HAP emission points in the pulping and bleaching systems; or
- (2) For the processes specified in paragraphs (a)(2) or (a)(3) of this section, the affected source is the total of all HAP emission points in the bleaching system.
- (c) The new source provisions of this subpart apply to the total of all HAP emission points at new or existing sources as follows:
 - (1) Each affected source defined in paragraph (b)(1) of this section that commences construction or reconstruction after December 17, 1993;
 - (2) Each pulping system or bleaching system for the processes specified in paragraph (a)(1) of this section that commences construction or reconstruction after December 17, 1993;
 - (3) Each additional pulping or bleaching line at the processes specified in paragraph (a)(1) of this section, that commences construction after December 17, 1993;
 - (4) Each affected source defined in paragraph (b)(2) of this section that commences construction or reconstruction after March 8, 1996; or
 - (5) Each additional bleaching line at the processes specified in paragraphs (a)(2) or (a)(3) of this section, that commences construction after March 8, 1996.
- (d) Each existing source shall achieve compliance no later than April 16, 2001, except as provided in paragraphs (d)(1) through (d)(3) of this section.
 - (1) Each kraft pulping system shall achieve compliance with the pulping system provisions of §63.443 for the equipment listed in §63.443(a)(1)(ii) through (a)(1)(v) as expeditiously as practicable, but in no event later than April 17, 2006 and the owners and operators shall establish dates, update dates, and report the dates for the milestones specified in §63.455(b).
 - (2) Each dissolving-grade bleaching system at either kraft or sulfite pulping mills shall achieve compliance with the bleach plant provisions of §63.445 of this subpart as expeditiously as practicable, but in no event later than 3 years after the promulgation of the revised effluent limitation guidelines and standards under 40 CFR 430.14 through 430.17 and 40 CFR 430.44 through 430.47.
 - (3) Each bleaching system complying with the Voluntary Advanced Technology Incentives Program for Effluent Limitation Guidelines in 40 CFR 430.24, shall comply with the requirements specified in either paragraph (d)(3)(i) or (d)(3)(ii) of this section for the effluent limitation guidelines and standards in 40 CFR 430.24.
 - (i) Comply with the bleach plant provisions of §63.445 of this subpart as expeditiously as practicable, but in no event later than April 16, 2001.
 - (ii) Comply with paragraphs (d)(3)(ii)(A), (d)(3)(ii)(B), and (d)(3)(ii)(C) of this section.
 - (A) The owner or operator of a bleaching system shall comply with the bleach plant provisions of §63.445 of this subpart as expeditiously as practicable, but in no event later than April 15, 2004.
 - (B) The owner or operator of a bleaching system shall comply with the requirements specified in either paragraph (d)(3)(ii)(B)(1) or (d)(3)(ii)(B)(2) of this section.
- (1) Not increase the application rate of chlorine or hypochlorite in kilograms (kg) of bleaching agent per megagram of ODP, in the bleaching system above the average daily rates used over the three

months prior to June 15, 1998 until the requirements of paragraph (d)(3)(ii)(A) of this section are met and record application rates as specified in §63.454(c).

(2) Comply with enforceable effluent limitations guidelines for 2,3,7,8-tetrachloro-dibenzo-p-dioxin and adsorbable organic halides at least as stringent as the baseline BAT levels set out in 40 CFR 430.24(a)(1) as expeditiously as possible, but in no event later than April 16, 2001.

(C) Owners and operators shall establish dates, update dates, and report the dates for the milestones specified in §63.455(b).

(e) Each new source, specified as the total of all HAP emission points for the sources specified in paragraph (c) of this section, shall achieve compliance upon start-up or June 15, 1998, whichever is later, as provided in §63.6(b) of subpart A of this part.

(f) Each owner or operator of an affected source with affected process equipment shared by more than one type of pulping process, shall comply with the applicable requirement in this subpart that achieves the maximum degree of reduction in HAP emissions.

(g) Each owner or operator of an affected source specified in paragraphs (a) through (c) of this section must comply with the requirements of subpart A—General Provisions of this part, as indicated in table 1 to this subpart.

[63 FR 18617, Apr. 15, 1998, as amended at 63 FR 71389, Dec. 28, 1998]

§ 63.441 Definitions.

All terms used in this subpart shall have the meaning given them in the CAA, in subpart A of this part, and in this section as follows:

Acid condensate storage tank means any storage tank containing cooking acid following the sulfur dioxide gas fortification process.

Black liquor means spent cooking liquor that has been separated from the pulp produced by the kraft, soda, or semi-chemical pulping process.

Bleaching means brightening of pulp by the addition of oxidizing chemicals or reducing chemicals.

Bleaching line means a group of bleaching stages arranged in series such that bleaching of the pulp progresses as the pulp moves from one stage to the next.

Bleaching stage means all process equipment associated with a discrete step of chemical application and removal in the bleaching process including chemical and steam mixers, bleaching towers, washers, seal (filtrate) tanks, vacuum pumps, and any other equipment serving the same function as those previously listed.

Bleaching system means all process equipment after high-density pulp storage prior to the first application of oxidizing chemicals or reducing chemicals following the pulping system, up to and including the final bleaching stage.

Boiler means any enclosed combustion device that extracts useful energy in the form of steam. A boiler is not considered a thermal oxidizer.

Chip steamer means a vessel used for the purpose of preheating or pretreating wood chips prior to the digester, using flash steam from the digester or live steam.

Closed-vent system means a system that is not open to the atmosphere and is composed of piping, ductwork, connections, and, if necessary, flow-inducing devices that transport gas or vapor from an emission point to a control device.

Combustion device means an individual unit of equipment, including but not limited to, a thermal oxidizer, lime kiln, recovery furnace, process heater, or boiler, used for the thermal oxidation of organic hazardous air pollutant vapors.

Decker system means all equipment used to thicken the pulp slurry or reduce its liquid content after the pulp washing system and prior to high-density pulp storage. The decker system includes decker vents, filtrate tanks, associated vacuum pumps, and any other equipment serving the same function as those previously listed.

Digester system means each continuous digester or each batch digester used for the chemical treatment of wood or non-wood fibers. The digester system equipment includes associated flash tank(s), blow tank(s), chip steamer(s) not using fresh steam, blow heat recovery accumulator(s), relief gas condenser(s), prehydrolysis unit(s) preceding the pulp washing system, and any other equipment serving the same function as those previously listed. The digester system includes any of the liquid streams or condensates associated with batch or continuous digester relief, blow, or flash steam processes.

Emission point means any part of a stationary source that emits hazardous air pollutants regulated under this subpart, including emissions from individual process vents, stacks, open pieces of process equipment, equipment leaks, wastewater and condensate collection and treatment system units, and those emissions that could reasonably be conveyed through a stack, chimney, or duct where such emissions first reach the environment.

Evaporator system means all equipment associated with increasing the solids content and/or concentrating spent cooking liquor from the pulp washing system including pre-evaporators, multi-effect evaporators, concentrators, and vacuum systems, as well as associated condensers, hotwells, and condensate streams, and any other equipment serving the same function as those previously listed.

Flow indicator means any device that indicates gas or liquid flow in an enclosed system.

HAP means a hazardous air pollutant as defined in §63.2 of subpart A of this part.

High volume, low concentration or HVLC collection system means the gas collection and transport system used to convey gases from the HVLC system to a control device.

High volume, low concentration or HVLC system means the collection of equipment including the pulp washing, knotter, screen, decker, and oxygen delignification systems, weak liquor storage tanks, and any other equipment serving the same function as those previously listed.

Knotted system means equipment where knots, oversized material, or pieces of uncooked wood are removed from the pulp slurry after the digester system and prior to the pulp washing system. The knotted system equipment includes the knotted, knot drainer tanks, ancillary tanks, and any other equipment serving the same function as those previously listed.

Kraft pulping means a chemical pulping process that uses a mixture of sodium hydroxide and sodium sulfide as the cooking liquor.

Lime kiln means an enclosed combustion device used to calcine lime mud, which consists primarily of calcium carbonate, into calcium oxide.

Low volume, high concentration or LVHC collection system means the gas collection and transport system used to convey gases from the LVHC system to a control device.

Low volume, high concentration or LVHC system means the collection of equipment including the digester, turpentine recovery, evaporator, steam stripper systems, and any other equipment serving the same function as those previously listed.

Mechanical pulping means a pulping process that only uses mechanical and thermo-mechanical processes to reduce wood to a fibrous mass. The mechanical pulping processes include, but are not limited to, stone groundwood, pressurized groundwood, refiner mechanical, thermal refiner mechanical, thermo-mechanical, and tandem thermo-mechanical.

Non-wood pulping means the production of pulp from fiber sources other than trees. The non-wood fiber sources include, but are not limited to, bagasse, cereal straw, cotton, flax straw, hemp, jute, kenaf, and leaf fibers.

Oven-dried pulp or ODP means a pulp sample at zero percent moisture content by weight. Pulp samples for applicability or compliance determinations for both the pulping and bleaching systems shall be unbleached pulp. For purposes of complying with mass emission limits in this subpart, megagram of ODP shall be measured to represent the amount of pulp entering and processed by the equipment system under the specified mass limit. For equipment that does not process pulp, megagram of ODP shall be measured to represent the amount of pulp that was processed to produce the gas and liquid streams.

Oxygen delignification system means the equipment that uses oxygen to remove lignin from pulp after high-density stock storage and prior to the bleaching system. The oxygen delignification system equipment includes the blow tank, washers, filtrate tanks, any interstage pulp storage tanks, and any other equipment serving the same function as those previously listed.

Primary fuel means the fuel that provides the principal heat input to the combustion device. To be considered primary, the fuel must be able to sustain operation of the combustion device without the addition of other fuels.

Process wastewater treatment system means a collection of equipment, a process, or specific technique that removes or destroys the HAPs in a process wastewater stream. Examples include, but are not limited to, a steam stripping unit, wastewater thermal oxidizer, or biological treatment unit.

Pulp washing system means all equipment used to wash pulp and separate spent cooking chemicals following the digester system and prior to the bleaching system, oxygen delignification system, or paper machine system (at unbleached mills). The pulp washing system equipment includes vacuum drum washers, diffusion washers, rotary pressure washers, horizontal belt filters, intermediate stock chests, and their associated vacuum pumps, filtrate tanks, foam breakers or tanks, and any other equipment serving the same function as those previously listed. The pulp washing system does not include deckers, screens, knotters, stock chests, or pulp storage tanks following the last stage of pulp washing.

Pulping line means a group of equipment arranged in series such that the wood chips are digested and the resulting pulp progresses through a sequence of steps that may include knotting, refining, washing, thickening, blending, storing, oxygen delignification, and any other equipment serving the same function as those previously listed.

Pulping process condensates means any HAP-containing liquid that results from contact of water with organic compounds in the pulping process. Examples of process condensates include digester

system condensates, turpentine recovery system condensates, evaporator system condensates, LVHC system condensates, HVLC system condensates, and any other condensates from equipment serving the same function as those previously listed. Liquid streams that are intended for byproduct recovery are not considered process condensate streams.

Pulping system means all process equipment, beginning with the digester system, and up to and including the last piece of pulp conditioning equipment prior to the bleaching system, including treatment with ozone, oxygen, or peroxide before the first application of a chemical bleaching agent intended to brighten pulp. The pulping system includes pulping process condensates and can include multiple pulping lines.

Recovery furnace means an enclosed combustion device where concentrated spent liquor is burned to recover sodium and sulfur, produce steam, and dispose of unwanted dissolved wood components in the liquor.

Screen system means equipment in which oversized particles are removed from the pulp slurry prior to the bleaching or papermaking system washed stock storage.

Secondary fiber pulping means a pulping process that converts a fibrous material, that has previously undergone a manufacturing process, into pulp stock through the addition of water and mechanical energy. The mill then uses that pulp as the raw material in another manufactured product. These mills may also utilize chemical, heat, and mechanical processes to remove ink particles from the fiber stock.

Semi-chemical pulping means a pulping process that combines both chemical and mechanical pulping processes. The semi-chemical pulping process produces intermediate yields ranging from 55 to 90 percent.

Soda pulping means a chemical pulping process that uses sodium hydroxide as the active chemical in the cooking liquor.

Spent liquor means process liquid generated from the separation of cooking liquor from pulp by the pulp washing system containing dissolved organic wood materials and residual cooking compounds.

Steam stripper system means a column (including associated stripper feed tanks, condensers, or heat exchangers) used to remove compounds from wastewater or condensates using steam. The steam stripper system also contains all equipment associated with a methanol rectification process including rectifiers, condensers, decanters, storage tanks, and any other equipment serving the same function as those previously listed.

Strong liquor storage tanks means all storage tanks containing liquor that has been concentrated in preparation for combustion or oxidation in the recovery process.

Sulfite pulping means a chemical pulping process that uses a mixture of sulfurous acid and bisulfite ion as the cooking liquor.

Temperature monitoring device means a piece of equipment used to monitor temperature and having an accuracy of ± 1.0 percent of the temperature being monitored expressed in degrees Celsius or ± 0.5 degrees Celsius ($^{\circ}\text{C}$), whichever is greater.

Thermal oxidizer means an enclosed device that destroys organic compounds by thermal oxidation.

Turpentine recovery system means all equipment associated with recovering turpentine from digester system gases including condensers, decanters, storage tanks, and any other equipment serving the same function as those previously listed. The turpentine recovery system includes any liquid streams

associated with the turpentine recovery process such as turpentine decanter underflow. Liquid streams that are intended for byproduct recovery are not considered turpentine recovery system condensate streams.

Weak liquor storage tank means any storage tank except washer filtrate tanks containing spent liquor recovered from the pulping process and prior to the evaporator system.

[63 FR 18617, Apr. 15, 1998, as amended at 64 FR 17563, Apr. 12, 1999]

§ 63.442 [Reserved]

§ 63.443 Standards for the pulping system at kraft, soda, and semi-chemical processes.

(a) The owner or operator of each pulping system using the kraft process subject to the requirements of this subpart shall control the total HAP emissions from the following equipment systems, as specified in paragraphs (c) and (d) of this section.

(1) At existing affected sources, the total HAP emissions from the following equipment systems shall be controlled:

(i) Each LVHC system;

(ii) Each knotter or screen system with total HAP mass emission rates greater than or equal to the rates specified in paragraphs (a)(1)(ii)(A) or (a)(1)(ii)(B) of this section or the combined rate specified in paragraph (a)(1)(ii)(C) of this section.

(A) Each knotter system with emissions of 0.05 kilograms or more of total HAP per megagram of ODP (0.1 pounds per ton).

(B) Each screen system with emissions of 0.10 kilograms or more of total HAP per megagram of ODP (0.2 pounds per ton).

(C) Each knotter and screen system with emissions of 0.15 kilograms or more of total HAP per megagram of ODP (0.3 pounds per ton).

(iii) Each pulp washing system;

(iv) Each decker system that:

(A) Uses any process water other than fresh water or paper machine white water; or

(B) Uses any process water with a total HAP concentration greater than 400 parts per million by weight; and

(v) Each oxygen delignification system.

(2) At new affected sources, the total HAP emissions from the equipment systems listed in paragraphs (a)(1)(i), (a)(1)(iii), and (a)(1)(v) of this section and the following equipment systems shall be controlled:

(i) Each knotter system;

(ii) Each screen system;

(iii) Each decker system; and

(iv) Each weak liquor storage tank.

(b) The owner or operator of each pulping system using a semi-chemical or soda process subject to the requirements of this subpart shall control the total HAP emissions from the following equipment systems as specified in paragraphs (c) and (d) of this section.

(1) At each existing affected source, the total HAP emissions from each LVHC system shall be controlled.

(2) At each new affected source, the total HAP emissions from each LVHC system and each pulp washing system shall be controlled.

(c) Equipment systems listed in paragraphs (a) and (b) of this section shall be enclosed and vented into a closed-vent system and routed to a control device that meets the requirements specified in paragraph (d) of this section. The enclosures and closed-vent system shall meet the requirements specified in §63.450.

(d) The control device used to reduce total HAP emissions from each equipment system listed in paragraphs (a) and (b) of this section shall:

(1) Reduce total HAP emissions by 98 percent or more by weight; or

(2) Reduce the total HAP concentration at the outlet of the thermal oxidizer to 20 parts per million or less by volume, corrected to 10 percent oxygen on a dry basis; or

(3) Reduce total HAP emissions using a thermal oxidizer designed and operated at a minimum temperature of 871 °C (1600 °F) and a minimum residence time of 0.75 seconds; or

(4) Reduce total HAP emissions using one of the following:

(i) A boiler, lime kiln, or recovery furnace by introducing the HAP emission stream with the primary fuel or into the flame zone; or

(ii) A boiler or recovery furnace with a heat input capacity greater than or equal to 44 megawatts (150 million British thermal units per hour) by introducing the HAP emission stream with the combustion air.

(e) Periods of excess emissions reported under §63.455 shall not be a violation of §63.443 (c) and (d) provided that the time of excess emissions (excluding periods of startup, shutdown, or malfunction) divided by the total process operating time in a semi-annual reporting period does not exceed the following levels:

(1) One percent for control devices used to reduce the total HAP emissions from the LVHC system; and

(2) Four percent for control devices used to reduce the total HAP emissions from the HVLC system; and

(3) Four percent for control devices used to reduce the total HAP emissions from both the LVHC and HVLC systems.

[63 FR 18617, Apr. 15, 1998, as amended at 64 FR 17563, Apr. 12, 1999; 66 FR 80762, Dec. 22, 2000]

§ 63.444 Standards for the pulping system at sulfite processes.

(a) The owner or operator of each sulfite process subject to the requirements of this subpart shall control the total HAP emissions from the following equipment systems as specified in paragraphs (b) and (c) of this section.

(1) At existing sulfite affected sources, the total HAP emissions from the following equipment systems shall be controlled:

(i) Each digester system vent;

(ii) Each evaporator system vent; and

(iii) Each pulp washing system.

(2) At new affected sources, the total HAP emissions from the equipment systems listed in paragraph (a)(1) of this section and the following equipment shall be controlled:

(i) Each weak liquor storage tank;

(ii) Each strong liquor storage tank; and

(iii) Each acid condensate storage tank.

(b) Equipment listed in paragraph (a) of this section shall be enclosed and vented into a closed-vent system and routed to a control device that meets the requirements specified in paragraph (c) of this section. The enclosures and closed-vent system shall meet the requirements specified in §63.450. Emissions from equipment listed in paragraph (a) of this section that is not necessary to be reduced to meet paragraph (c) of this section is not required to be routed to a control device.

(c) The total HAP emissions from both the equipment systems listed in paragraph (a) of this section and the vents, wastewater, and condensate streams from the control device used to reduce HAP emissions, shall be controlled as follows.

(1) Each calcium-based or sodium-based sulfite pulping process shall:

(i) Emit no more than 0.44 kilograms of total HAP or methanol per megagram (0.89 pounds per ton) of ODP; or

(ii) Remove 92 percent or more by weight of the total HAP or methanol.

(2) Each magnesium-based or ammonium-based sulfite pulping process shall:

(i) Emit no more than 1.1 kilograms of total HAP or methanol per megagram (2.2 pounds per ton) of ODP; or

(ii) Remove 87 percent or more by weight of the total HAP or methanol.

§ 63.445 Standards for the bleaching system.

(a) Each bleaching system that does not use any chlorine or chlorinated compounds for bleaching is exempt from the requirements of this section. Owners or operators of the following bleaching systems shall meet all the provisions of this section:

(1) Bleaching systems that use chlorine;

(2) Bleaching systems bleaching pulp from kraft, sulfite, or soda pulping processes that use any chlorinated compounds; or

(3) Bleaching systems bleaching pulp from mechanical pulping processes using wood or from any process using secondary or non-wood fibers, that use chlorine dioxide.

(b) The equipment at each bleaching stage, of the bleaching systems listed in paragraph (a) of this section, where chlorinated compounds are introduced shall be enclosed and vented into a closed-vent system and routed to a control device that meets the requirements specified in paragraph (c) of this section. The enclosures and closed-vent system shall meet the requirements specified in §63.450. If process modifications are used to achieve compliance with the emission limits specified in paragraphs (c)(2) or (c)(3), enclosures and closed-vent systems are not required, unless appropriate.

(c) The control device used to reduce chlorinated HAP emissions (not including chloroform) from the equipment specified in paragraph (b) of this section shall:

- (1) Reduce the total chlorinated HAP mass in the vent stream entering the control device by 99 percent or more by weight;
- (2) Achieve a treatment device outlet concentration of 10 parts per million or less by volume of total chlorinated HAP; or
- (3) Achieve a treatment device outlet mass emission rate of 0.001 kg of total chlorinated HAP mass per megagram (0.002 pounds per ton) of ODP.

(d) The owner or operator of each bleaching system subject to paragraph (a)(2) of this section shall comply with paragraph (d)(1) or (d)(2) of this section to reduce chloroform air emissions to the atmosphere, except the owner or operator of each bleaching system complying with extended compliance under §63.440(d)(3)(ii) shall comply with paragraph (d)(1) of this section.

(1) Comply with the following applicable effluent limitation guidelines and standards specified in 40 CFR part 430:

- (i) Dissolving-grade kraft bleaching systems and lines, 40 CFR 430.14 through 430.17;
- (ii) Paper-grade kraft and soda bleaching systems and lines, 40 CFR 430.24(a)(1) and (e), and 40 CFR 430.26 (a) and (c);
- (iii) Dissolving-grade sulfite bleaching systems and lines, 40 CFR 430.44 through 430.47; or
- (iv) Paper-grade sulfite bleaching systems and lines, 40 CFR 430.54(a) and (c), and 430.56(a) and (c).

(2) Use no hypochlorite or chlorine for bleaching in the bleaching system or line.

[63 FR 18617, Apr. 15, 1998, as amended at 64 FR 17563, Apr. 12, 1999

§ 63.446 Standards for kraft pulping process condensates.

(a) The requirements of this section apply to owners or operators of kraft processes subject to the requirements of this subpart.

(b) The pulping process condensates from the following equipment systems shall be treated to meet the requirements specified in paragraphs (c), (d), and (e) of this section:

- (1) Each digester system;
- (2) Each turpentine recovery system;
- (3) Each evaporator system condensate from:
 - (i) The vapors from each stage where weak liquor is introduced (feed stages); and
 - (ii) Each evaporator vacuum system for each stage where weak liquor is introduced (feed stages).
- (4) Each HVLC collection system; and
- (5) Each LVHC collection system.

(c) One of the following combinations of HAP-containing pulping process condensates generated, produced, or associated with the equipment systems listed in paragraph (b) of this section shall be subject to the requirements of paragraphs (d) and (e) of this section:

(1) All pulping process condensates from the equipment systems specified in paragraphs (b)(1) through (b)(5) of this section.

(2) The combined pulping process condensates from the equipment systems specified in paragraphs (b)(4) and (b)(5) of this section, plus pulping process condensate stream(s) that in total contain at least 65 percent of the total HAP mass from the pulping process condensates from equipment systems listed in paragraphs (b)(1) through (b)(3) of this section.

(3) The pulping process condensates from equipment systems listed in paragraphs (b)(1) through (b)(5) of this section that in total contain a total HAP mass of 3.6 kilograms or more of total HAP per megagram (7.2 pounds per ton) of ODP for mills that do not perform bleaching or 5.5 kilograms or more of total HAP per megagram (11.1 pounds per ton) of ODP for mills that perform bleaching.

(d) The pulping process condensates from the equipment systems listed in paragraph (b) of this section shall be conveyed in a closed collection system that is designed and operated to meet the requirements specified in paragraphs (d)(1) and (d)(2) of this section.

(1) Each closed collection system shall meet the individual drain system requirements specified in §§63.960, 63.961, and 63.962 of subpart RR of this part, except for closed vent systems and control devices shall be designed and operated in accordance with §§63.443(d) and 63.450, instead of in accordance with §63.693 as specified in §63.962 (a)(3)(ii), (b)(3)(ii)(A), and (b)(5)(iii); and

(2) If a condensate tank is used in the closed collection system, the tank shall meet the following requirements:

(i) The fixed roof and all openings (e.g., access hatches, sampling ports, gauge wells) shall be designed and operated with no detectable leaks as indicated by an instrument reading of less than 500 parts per million above background, and vented into a closed-vent system that meets the requirements in §63.450 and routed to a control device that meets the requirements in §63.443(d); and

(ii) Each opening shall be maintained in a closed, sealed position (e.g., covered by a lid that is gasketed and latched) at all times that the tank contains pulping process condensates or any HAP removed from a pulping process condensate stream except when it is necessary to use the opening for sampling, removal, or for equipment inspection, maintenance, or repair.

(e) Each pulping process condensate from the equipment systems listed in paragraph (b) of this section shall be treated according to one of the following options:

(1) Recycle the pulping process condensate to an equipment system specified in §63.443(a) meeting the requirements specified in §63.443(c) and (d); or

(2) Discharge the pulping process condensate below the liquid surface of a biological treatment system and treat the pulping process condensates to meet the requirements specified in paragraph (e)(3), (4), or (5) of this section, and total HAP shall be measured as specified in §63.457(g); or

(3) Treat the pulping process condensates to reduce or destroy the total HAPs by at least 92 percent or more by weight; or

(4) At mills that do not perform bleaching, treat the pulping process condensates to remove 3.3 kilograms or more of total HAP per megagram (6.6 pounds per ton) of ODP, or achieve a total HAP concentration of 210 parts per million or less by weight at the outlet of the control device; or

(5) At mills that perform bleaching, treat the pulping process condensates to remove 5.1 kilograms or more of total HAP per megagram (10.2 pounds per ton) of ODP, or achieve a total HAP concentration of 330 parts per million or less by weight at the outlet of the control device.

(f) Each HAP removed from a pulping process condensate stream during treatment and handling under paragraphs (d) or (e) of this section, except for those treated according to paragraph (e)(2) of this section, shall be controlled as specified in §63.443(c) and (d).

(g) For each control device (e.g. steam stripper system or other equipment serving the same function) used to treat pulping process condensates to comply with the requirements specified in paragraphs (e)(3) through (e)(5) of this section, periods of excess emissions reported under §63.455 shall not be a violation of paragraphs (d), (e)(3) through (e)(5), and (f) of this section provided that the time of excess emissions (including periods of startup, shutdown, or malfunction) divided by the total process operating time in a semi-annual reporting period does not exceed 10 percent. The 10 percent excess emissions allowance does not apply to treatment of pulping process condensates according to paragraph (e)(2) of this section (e.g. the biological wastewater treatment system used to treat multiple (primarily non-condensate) wastewater streams to comply with the Clean Water Act).

(h) Each owner or operator of a new or existing affected source subject to the requirements of this section shall evaluate all new or modified pulping process condensates or changes in the annual bleached or non-bleached ODP used to comply with paragraph (i) of this section, to determine if they meet the applicable requirements of this section.

(i) For the purposes of meeting the requirements in paragraph (c)(2) or (3) or paragraph (e)(4) or (5) of this section at mills producing both bleached and unbleached pulp products, owners and operators may meet a prorated mass standard that is calculated by prorating the applicable mass standards (kilograms of total HAP per megagram of ODP) for bleached and unbleached mills specified in paragraph (c)(2) or (3) or paragraph (e)(4) or (5) of this section by the ratio of annual megagrams of bleached and unbleached ODP.

[63 FR 18617, Apr. 15, 1998; 63 FR 42239, Aug. 7, 1998, as amended at 63 FR 49459, Sept. 16, 1998; 64 FR 17563, Apr. 12, 1999; 65 FR 80762, Dec. 22, 2000]

§ 63.447 Clean condensate alternative.

As an alternative to the requirements specified in §63.443(a)(1)(ii) through (a)(1)(v) for the control of HAP emissions from pulping systems using the kraft process, an owner or operator must demonstrate to the satisfaction of the Administrator, by meeting all the requirements below, that the total HAP emissions reductions achieved by this clean condensate alternative technology are equal to or greater than the total HAP emission reductions that would have been achieved by compliance with §63.443(a)(1)(ii) through (a)(1)(v).

(a) For the purposes of this section only the following additional definitions apply.

(1) Clean condensate alternative affected source means the total of all HAP emission points in the pulping, bleaching, causticizing, and papermaking systems (exclusive of HAP emissions attributable to additives to paper machines and HAP emission points in the LVHC system).

(2) Causticizing system means all equipment associated with converting sodium carbonate into active sodium hydroxide. The equipment includes smelt dissolving tanks, lime mud washers and storage tanks, white and mud liquor clarifiers and storage tanks, slakers, slaker grit washers, lime kilns, green liquor clarifiers and storage tanks, and dreg washers ending with the white liquor storage tanks prior to the digester system, and any other equipment serving the same function as those previously listed.

(3) Papermaking system means all equipment used to convert pulp into paper, paperboard, or market pulp, including the stock storage and preparation systems, the paper or paperboard machines, and the paper machine white water system, broke recovery systems, and the systems involved in calendering, drying, on-machine coating, slitting, winding, and cutting.

(b) Each owner or operator shall install and operate a clean condensate alternative technology with a continuous monitoring system to reduce total HAP emissions by treating and reducing HAP concentrations in the pulping process water used within the clean condensate alternative affected source.

(c) Each owner or operator shall calculate HAP emissions on a kilogram per megagram of ODP basis and measure HAP emissions according to the appropriate procedures contained in §63.457.

(d) Each owner or operator shall determine the baseline HAP emissions for each equipment system and the total of all equipment systems in the clean condensate alternative affected source based on the following:

- (1) Process and air pollution control equipment installed and operating on December 17, 1993, and
- (2) Compliance with the following requirements that affect the level of HAP emissions from the clean condensate alternative affected source:

(i) The pulping process condensates requirements in §63.446;

(ii) The applicable effluent limitation guidelines and standards in 40 CFR part 430, subparts A, B, D, and E; and

(iii) All other applicable requirements of local, State, or Federal agencies or statutes.

(e) Each owner or operator shall determine the following HAP emission reductions from the baseline HAP emissions determined in paragraph (d) of this section for each equipment system and the total of all equipment systems in the clean condensate alternative affected source:

(1) The HAP emission reduction occurring by complying with the requirements of §63.443(a)(1)(ii) through (a)(1)(v); and

(2) The HAP emissions reduction occurring by complying with the clean condensate alternative technology.

(f) For the purposes of all requirements in this section, each owner or operator may use as an alternative, individual equipment systems (instead of total of all equipment systems) within the clean condensate alternative affected source to determine emissions and reductions to demonstrate equal or greater than the reductions that would have been achieved by compliance with §63.443(a)(1)(ii) through (a)(1)(v).

(g) The initial and updates to the control strategy report specified in §63.455(b) shall include to the extent possible the following information:

(1) A detailed description of:

(i) The equipment systems and emission points that comprise the clean condensate alternative affected source;

(ii) The air pollution control technologies that would be used to meet the requirements of §63.443(a)(1)(ii) through (a)(1)(v); and

(iii) The clean condensate alternative technology to be used.

(2) Estimates and basis for the estimates of total HAP emissions and emission reductions to fulfill the requirements of paragraphs (d), (e), and (f) of this section.

(h) Each owner or operator shall report to the Administrator by the applicable compliance date specified in §63.440(d) or (e) the rationale, calculations, test procedures, and data documentation used to demonstrate compliance with all the requirements of this section.

[63 FR 18617, Apr. 15, 1998; 63 FR 42239, Aug. 7, 1998, as amended at 64 FR 17563, Apr. 12, 1999]

§§ 63.448-63.449 [Reserved]

§ 63.450 Standards for enclosures and closed-vent systems.

(a) Each enclosure and closed-vent system specified in §§63.443(c), 63.444(b), and 63.445(b) for capturing and transporting vent streams that contain HAP shall meet the requirements specified in paragraphs (b) through (d) of this section.

(b) Each enclosure shall maintain negative pressure at each enclosure or hood opening as demonstrated by the procedures specified in §63.457(e). Each enclosure or hood opening closed during the initial performance test specified in §63.457(a) shall be maintained in the same closed and sealed position as during the performance test at all times except when necessary to use the opening for sampling, inspection, maintenance, or repairs.

(c) Each component of the closed-vent system used to comply with §§63.443(c), 63.444(b), and 63.445(b) that is operated at positive pressure and located prior to a control device shall be designed for and operated with no detectable leaks as indicated by an instrument reading of less than 500 parts per million by volume above background, as measured by the procedures specified in §63.457(d).

(d) Each bypass line in the closed-vent system that could divert vent streams containing HAP to the atmosphere without meeting the emission limitations in §§63.443, 63.444, or 63.445 shall comply with either of the following requirements:

(1) On each bypass line, the owner or operator shall install, calibrate, maintain, and operate according to the manufacturer's specifications a flow indicator that is capable of taking periodic readings as frequently as specified in §63.454(e). The flow indicator shall be installed in the bypass line in such a way as to indicate flow in the bypass line; or

(2) For bypass line valves that are not computer controlled, the owner or operator shall maintain the bypass line valve in the closed position with a car seal or a seal placed on the valve or closure mechanism in such a way that valve or closure mechanism cannot be opened without breaking the seal.

[63 FR 18617, Apr. 15, 1998, as amended at 64 FR 17563, Apr. 12, 1999; 68 FR 37348, June 23, 2003]

§§ 63.451-63.452 [Reserved]

§ 63.453 Monitoring requirements.

(a) Each owner or operator subject to the standards specified in §§63.443(c) and (d), 63.444(b) and (c), 63.445(b) and (c), 63.446(c), (d), and (e), 63.447(b) or §63.450(d), shall install, calibrate, certify, operate, and maintain according to the manufacturer's specifications, a continuous monitoring system

(CMS, as defined in §63.2 of this part) as specified in paragraphs (b) through (m) of this section, except as allowed in paragraph (m) of this section. The CMS shall include a continuous recorder.

(b) A CMS shall be operated to measure the temperature in the firebox or in the ductwork immediately downstream of the firebox and before any substantial heat exchange occurs for each thermal oxidizer used to comply with the requirements of §63.443(d)(1) through (d)(3). Owners and operators complying with the HAP concentration requirements in §63.443(d)(2) may install a CMS to monitor the thermal oxidizer outlet total HAP or methanol concentration, as an alternative to monitoring thermal oxidizer operating temperature.

(c) A CMS shall be operated to measure the following parameters for each gas scrubber used to comply with the bleaching system requirements of §63.445(c) or the sulfite pulping system requirements of §63.444(c).

(1) The pH or the oxidation/reduction potential of the gas scrubber effluent;

(2) The gas scrubber vent gas inlet flow rate; and

(3) The gas scrubber liquid influent flow rate.

(d) As an option to the requirements specified in paragraph (c) of this section, a CMS shall be operated to measure the chlorine outlet concentration of each gas scrubber used to comply with the bleaching system outlet concentration requirement specified in §63.445(c)(2).

(e) The owner or operator of a bleaching system complying with 40 CFR 430.24, shall monitor the chlorine and hypochlorite application rates, in kg of bleaching agent per megagram of ODP, of the bleaching system during the extended compliance period specified in §63.440(d)(3).

(f) A CMS shall be operated to measure the gas scrubber parameters specified in paragraphs (c)(1) through (c)(3) of this section or those site specific parameters determined according to the procedures specified in paragraph (n) of this section to comply with the sulfite pulping system requirements specified in §63.444(c).

(g) A CMS shall be operated to measure the following parameters for each steam stripper used to comply with the treatment requirements in §63.446(e) (3), (4), or (5):

(1) The process wastewater feed rate;

(2) The steam feed rate; and

(3) The process wastewater column feed temperature.

(h) As an option to the requirements specified in paragraph (g) of this section, a CMS shall be operated to measure the methanol outlet concentration to comply with the steam stripper outlet concentration requirement specified in §63.446 (e)(4) or (e)(5).

(i) A CMS shall be operated to measure the appropriate parameters determined according to the procedures specified in paragraph (n) of this section to comply with the condensate applicability requirements specified in §63.446(c).

(j) Each owner or operator using an open biological treatment system to comply with §63.446(e)(2) shall perform the daily monitoring procedures specified in either paragraph (j)(1) or (2) of this section and shall conduct a performance test each quarter using the procedures specified in paragraph (j)(3) of this section.

(1) Comply with the monitoring and sampling requirements specified in paragraphs (j)(1)(i) and (ii) of this section.

(i) On a daily basis, monitor the following parameters for each open biological treatment unit:

- (A) Composite daily sample of outlet soluble BOD₅ concentration to monitor for maximum daily and maximum monthly average;
- (B) Mixed liquor volatile suspended solids;
- (C) Horsepower of aerator unit(s);
- (D) Inlet liquid flow; and
- (E) Liquid temperature.

(ii) If the Inlet and Outlet Concentration Measurement Procedure (Procedure 3) in appendix C of this part is used to determine the fraction of HAP compounds degraded in the biological treatment system as specified in §63.457(l), conduct the sampling and archival requirements specified in paragraphs (j)(1)(ii)(A) and (B) of this section.

(A) Obtain daily inlet and outlet liquid grab samples from each biological treatment unit to have HAP data available to perform quarterly performance tests specified in paragraph (j)(3) of this section and the compliance tests specified in paragraph (p) of this section.

(B) Store the samples as specified in §63.457(n) until after the results of the soluble BOD₅ test required in paragraph (j)(1)(i)(A) of this section are obtained. The storage requirement is needed since the soluble BOD₅ test requires 5 days or more to obtain results. If the results of the soluble BOD₅ test are outside of the range established during the initial performance test, then the archive sample shall be used to perform the mass removal or percent reduction determinations.

(2) As an alternative to the monitoring requirements of paragraph (j)(1) of this section, conduct daily monitoring of the site-specific parameters established according to the procedures specified in paragraph (n) of this section.

(3) Conduct a performance test as specified in §63.457(l) within 45 days after the beginning of each quarter and meet the applicable emission limit in §63.446(e)(2).

(i) The performance test conducted in the first quarter (annually) shall be performed for total HAP as specified in §63.457(g) and meet the percent reduction or mass removal emission limit specified in §63.446(e)(2).

(ii) The remaining quarterly performance tests shall be performed as specified in paragraph (j)(3)(i) of this section except owners or operators may use the applicable methanol procedure in §63.457(l)(1) or (2) and the value of *r* determined during the first quarter test instead of measuring the additional HAP to determine a new value of *r*.

(k) Each enclosure and closed-vent system used to comply with §63.450(a) shall comply with the requirements specified in paragraphs (k)(1) through (k)(6) of this section.

(1) For each enclosure opening, a visual inspection of the closure mechanism specified in §63.450(b) shall be performed at least once every 30 days to ensure the opening is maintained in the closed position and sealed.

(2) Each closed-vent system required by §63.450(a) shall be visually inspected every 30 days and at other times as requested by the Administrator. The visual inspection shall include inspection of ductwork, piping, enclosures, and connections to covers for visible evidence of defects.

(3) For positive pressure closed-vent systems or portions of closed-vent systems, demonstrate no detectable leaks as specified in §63.450(c) measured initially and annually by the procedures in §63.457(d).

(4) Demonstrate initially and annually that each enclosure opening is maintained at negative pressure as specified in §63.457(e).

(5) The valve or closure mechanism specified in §63.450(d)(2) shall be inspected at least once every 30 days to ensure that the valve is maintained in the closed position and the emission point gas stream is not diverted through the bypass line.

(6) If an inspection required by paragraphs (k)(1) through (k)(5) of this section identifies visible defects in ductwork, piping, enclosures or connections to covers required by §63.450, or if an instrument reading of 500 parts per million by volume or greater above background is measured, or if enclosure openings are not maintained at negative pressure, then the following corrective actions shall be taken as soon as practicable.

(i) A first effort to repair or correct the closed-vent system shall be made as soon as practicable but no later than 5 calendar days after the problem is identified.

(ii) The repair or corrective action shall be completed no later than 15 calendar days after the problem is identified. Delay of repair or corrective action is allowed if the repair or corrective action is technically infeasible without a process unit shutdown or if the owner or operator determines that the emissions resulting from immediate repair would be greater than the emissions likely to result from delay of repair. Repair of such equipment shall be completed by the end of the next process unit shutdown.

(l) Each pulping process condensate closed collection system used to comply with §63.446(d) shall comply with the requirements specified in paragraphs (l)(1) through (l)(3) of this section.

(1) Each pulping process condensate closed collection system shall be visually inspected every 30 days and shall comply with the inspection and monitoring requirements specified in §63.964 of subpart RR of this part, except:

(i) Owners or operators shall comply with the recordkeeping requirements of §63.454 instead of the requirements specified in §63.964(a)(1)(vi) and (b)(3) of subpart RR of this part.

(ii) Owners or operators shall comply with the inspection and monitoring requirements for closed-vent systems and control devices specified in paragraphs (a) and (k) of this section instead of the requirements specified in §63.964(a)(2) of subpart RR of this part.

(2) Each condensate tank used in the closed collection system shall be operated with no detectable leaks as specified in §63.446(d)(2)(i) measured initially and annually by the procedures specified in §63.457(d).

(3) If an inspection required by this section identifies visible defects in the closed collection system, or if an instrument reading of 500 parts per million or greater above background is measured, then corrective actions specified in §63.964(b) of subpart RR of this part shall be taken.

(m) Each owner or operator using a control device, technique or an alternative parameter other than those specified in paragraphs (b) through (l) of this section shall install a CMS and establish appropriate operating parameters to be monitored that demonstrate, to the Administrator's satisfaction, continuous compliance with the applicable control requirements.

(n) To establish or reestablish the value for each operating parameter required to be monitored under paragraphs (b) through (j), (l), and (m) of this section or to establish appropriate parameters for paragraphs (f), (i), (j)(2), and (m) of this section, each owner or operator shall use the following procedures:

(1) During the initial performance test required in §63.457(a) or any subsequent performance test, continuously record the operating parameter;

(2) Determinations shall be based on the control performance and parameter data monitored during the performance test, supplemented if necessary by engineering assessments and the manufacturer's recommendations;

(3) The owner or operator shall provide for the Administrator's approval the rationale for selecting the monitoring parameters necessary to comply with paragraphs (f), (i), and (m) of this section; and

(4) Provide for the Administrator's approval the rationale for the selected operating parameter value, and monitoring frequency, and averaging time. Include all data and calculations used to develop the value and a description of why the value, monitoring frequency, and averaging time demonstrate continuous compliance with the applicable emission standard.

(o) Each owner or operator of a control device subject to the monitoring provisions of this section shall operate the control device in a manner consistent with the minimum or maximum (as appropriate) operating parameter value or procedure required to be monitored under paragraphs (a) through (n) of this section and established under this subpart. Except as provided in paragraph (p) of this section, §63.443(e), or §63.446(g), operation of the control device below minimum operating parameter values or above maximum operating parameter values established under this subpart or failure to perform procedures required by this subpart shall constitute a violation of the applicable emission standard of this subpart and be reported as a period of excess emissions.

(p) The procedures of this paragraph apply to each owner or operator of an open biological treatment system complying with paragraph (j) of this section whenever a monitoring parameter excursion occurs, and the owner or operator chooses to conduct a performance test to demonstrate compliance with the applicable emission limit. A monitoring parameter excursion occurs whenever the monitoring parameters specified in paragraphs (j)(1)(i)(A) through (C) of this section or any of the monitoring parameters specified in paragraph (j)(2) of this section are below minimum operating parameter values or above maximum operating parameter values established in paragraph (n) of this section.

(1) As soon as practical after the beginning of the monitoring parameter excursion, the following requirements shall be met:

(i) Before the steps in paragraph (p)(1)(ii) or (iii) of this section are performed, all sampling and measurements necessary to meet the requirements in paragraph (p)(2) of this section shall be conducted.

(ii) Steps shall be taken to repair or adjust the operation of the process to end the parameter excursion period.

(iii) Steps shall be taken to minimize total HAP emissions to the atmosphere during the parameter excursion period.

(2) A parameter excursion is not a violation of the applicable emission standard if the results of the performance test conducted using the procedures in this paragraph demonstrate compliance with the applicable emission limit in §63.446(e)(2).

(i) Conduct a performance test as specified in §63.457 using the monitoring data specified in paragraph (j)(1) or (2) of this section that coincides with the time of the parameter excursion. No maintenance or changes shall be made to the open biological treatment system after the beginning of a parameter excursion that would influence the results of the performance test.

(ii) If the results of the performance test specified in paragraph (p)(2)(i) of this section demonstrate compliance with the applicable emission limit in §63.446(e)(2), then the parameter excursion is not a violation of the applicable emission limit.

(iii) If the results of the performance test specified in paragraph (p)(2)(i) of this section do not demonstrate compliance with the applicable emission limit in §63.446(e)(2) because the total HAP mass entering the open biological treatment system is below the level needed to demonstrate compliance with the applicable emission limit in §63.446(e)(2), then the owner or operator shall perform the following comparisons:

(A) If the value of f_{bio} (MeOH) determined during the performance test specified in paragraph (p)(2)(i) of this section is within the range of values established during the initial and subsequent performance tests approved by the Administrator, then the parameter excursion is not a violation of the applicable standard.

(B) If the value of f_{bio} (MeOH) determined during the performance test specified in paragraph (p)(2)(i) of this section is not within the range of values established during the initial and subsequent performance tests approved by the Administrator, then the parameter excursion is a violation of the applicable standard.

(iv) The results of the performance test specified in paragraph (p)(2)(i) of this section shall be recorded as specified in §63.454(f).

(3) If an owner or operator determines that performing the required procedures under paragraph (p)(2) of this section for a nonthoroughly mixed open biological system would expose a worker to dangerous, hazardous, or otherwise unsafe conditions, all of the following procedures shall be performed:

(i) Calculate the mass removal or percent reduction value using the procedures specified in §63.457(l) except the value for f_{bio} (MeOH) shall be determined using the procedures in appendix E to this part.

(ii) Repeat the procedures in paragraph (p)(3)(i) of this section for every day until the unsafe conditions have passed.

(iii) A parameter excursion is a violation of the standard if the percent reduction or mass removal determined in paragraph (p)(3)(i) of this section is less than the percent reduction or mass removal standards specified in §63.446(e)(2), as appropriate, unless the value of f_{bio} (MeOH) determined using the procedures in appendix E of this section, as specified in paragraph (p)(3)(i), is within the range of f_{bio} (MeOH) values established during the initial and subsequent performance tests previously approved by the Administrator.

(iv) The determination that there is a condition that exposes a worker to dangerous, hazardous, or otherwise unsafe conditions shall be documented according to requirements in §63.454(e) and reporting in §63.455(f).

(v) The requirements of paragraphs (p)(1) and (2) of this section shall be performed and met as soon as practical but no later than 24 hours after the conditions have passed that exposed a worker to dangerous, hazardous, or otherwise unsafe conditions.

[63 FR 18617, Apr. 15, 1998, as amended at 64 FR 17563, Apr. 12, 1999; 65 FR 80762, Dec. 22, 2000]

§ 63.454 Recordkeeping requirements.

(a) The owner or operator of each affected source subject to the requirements of this subpart shall comply with the recordkeeping requirements of §63.10, as shown in table 1 of this subpart, and the requirements specified in paragraphs (b) through (f) of this section for the monitoring parameters specified in §63.453.

(b) For each applicable enclosure opening, closed-vent system, and closed collection system, the owner or operator shall prepare and maintain a site-specific inspection plan including a drawing or schematic of the components of applicable affected equipment and shall record the following information for each inspection:

- (1) Date of inspection;
- (2) The equipment type and identification;
- (3) Results of negative pressure tests for enclosures;
- (4) Results of leak detection tests;
- (5) The nature of the defect or leak and the method of detection (i.e., visual inspection or instrument detection);
- (6) The date the defect or leak was detected and the date of each attempt to repair the defect or leak;
- (7) Repair methods applied in each attempt to repair the defect or leak;
- (8) The reason for the delay if the defect or leak is not repaired within 15 days after discovery;
- (9) The expected date of successful repair of the defect or leak if the repair is not completed within 15 days;
- (10) The date of successful repair of the defect or leak;
- (11) The position and duration of opening of bypass line valves and the condition of any valve seals; and
- (12) The duration of the use of bypass valves on computer controlled valves.

(c) The owner or operator of a bleaching system complying with §63.440(d)(3)(ii)(B) shall record the daily average chlorine and hypochlorite application rates, in kg of bleaching agent per megagram of ODP, of the bleaching system until the requirements specified in §63.440(d)(3)(ii)(A) are met.

(d) The owner or operator shall record the CMS parameters specified in §63.453 and meet the requirements specified in paragraph (a) of this section for any new affected process equipment or pulping process condensate stream that becomes subject to the standards in this subpart due to a process change or modification.

(e) The owner or operator shall set the flow indicator on each bypass line specified in §63.450(d)(1) to provide a record of the presence of gas stream flow in the bypass line at least once every 15 minutes.

(f) The owner or operator of an open biological treatment system complying with §63.453(p) shall prepare a written record specifying the results of the performance test specified in §63.453(p)(2).

[63 FR 18617, Apr. 15, 1998, as amended at 65 FR 80763, Dec. 22, 2000; 68 FR 37348, June 23, 2003]

§ 63.455 Reporting requirements.

(a) Each owner or operator of a source subject to this subpart shall comply with the reporting requirements of subpart A of this part as specified in table 1 and all the following requirements in this section. The initial notification report specified under §63.9(b)(2) of subpart A of this part shall be submitted by April 15, 1999.

(b) Each owner or operator of a kraft pulping system specified in §63.440(d)(1) or a bleaching system specified in §63.440(d)(3)(ii) shall submit, with the initial notification report specified under §63.9(b)(2) of subpart A of this part and paragraph (a) of this section and update every two years thereafter, a non-binding control strategy report containing, at a minimum, the information specified in paragraphs (b)(1) through (b)(3) of this section in addition to the information required in §63.9(b)(2) of subpart A of this part.

(1) A description of the emission controls or process modifications selected for compliance with the control requirements in this standard.

(2) A compliance schedule, including the dates by which each step toward compliance will be reached for each emission point or sets of emission points. At a minimum, the list of dates shall include:

(i) The date by which the major study(s) for determining the compliance strategy will be completed;

(ii) The date by which contracts for emission controls or process modifications will be awarded, or the date by which orders will be issued for the purchase of major components to accomplish emission controls or process changes;

(iii) The date by which on-site construction, installation of emission control equipment, or a process change is to be initiated;

(iv) The date by which on-site construction, installation of emissions control equipment, or a process change is to be completed;

(v) The date by which final compliance is to be achieved;

(vi) For compliance with paragraph §63.440(d)(3)(ii), the tentative dates by which compliance with effluent limitation guidelines and standards intermediate pollutant load effluent reductions and as available, all the dates for the best available technology's milestones reported in the National Pollutant Discharge Elimination System authorized under section 402 of the Clean Water Act and for the best professional milestones in the Voluntary Advanced Technology Incentives Program under 40 CFR 430.24 (b)(2); and

(vii) The date by which the final compliance tests will be performed.

(3) Until compliance is achieved, revisions or updates shall be made to the control strategy report required by paragraph (b) of this section indicating the progress made towards completing the installation of the emission controls or process modifications during the 2-year period.

(c) The owner or operator of each bleaching system complying with §63.440(d)(3)(ii)(B) shall certify in the report specified under §63.10(e)(3) of subpart A of this part that the daily application rates of

chlorine and hypochlorite for that bleaching system have not increased as specified in §63.440(d)(3)(ii)(B) until the requirements of §63.440(d)(3)(ii)(A) are met.

(d) The owner or operator shall meet the requirements specified in paragraph (a) of this section upon startup of any new affected process equipment or pulping process condensate stream that becomes subject to the standards of this subpart due to a process change or modification.

(e) If the owner or operator uses the results of the performance test required in §63.453(p)(2) to revise the approved values or ranges of the monitoring parameters specified in §63.453(j)(1) or (2), the owner or operator shall submit an initial notification of the subsequent performance test to the Administrator as soon as practicable, but no later than 15 days, before the performance test required in §63.453(p)(2) is scheduled to be conducted. The owner or operator shall notify the Administrator as soon as practicable, but no later than 24 hours, before the performance test is scheduled to be conducted to confirm the exact date and time of the performance test.

(f) To comply with the open biological treatment system monitoring provisions of §63.453(p)(3), the owner or operator shall notify the Administrator as soon as practicable of the onset of the dangerous, hazardous, or otherwise unsafe conditions that did not allow a compliance determination to be conducted using the sampling and test procedures in §63.457(l). The notification shall occur no later than 24 hours after the onset of the dangerous, hazardous, or otherwise unsafe conditions and shall include the specific reason(s) that the sampling and test procedures in §63.457(l) could not be performed.

[63 FR 18617, Apr. 15, 1998, as amended at 65 FR 80763, Dec. 22, 2000]

§ 63.456 [Reserved]

§ 63.457 Test methods and procedures.

(a) Initial performance test. An initial performance test is required for all emission sources subject to the limitations in §§63.443, 63.444, 63.445, 63.446, and 63.447, except those controlled by a combustion device that is designed and operated as specified in §63.443(d)(3) or (d)(4).

(b) Vent sampling port locations and gas stream properties. For purposes of selecting vent sampling port locations and determining vent gas stream properties, required in §§63.443, 63.444, 63.445, and 63.447, each owner or operator shall comply with the applicable procedures in paragraphs (b)(1) through (b)(6) of this section.

(1) Method 1 or 1A of part 60, appendix A, as appropriate, shall be used for selection of the sampling site as follows:

(i) To sample for vent gas concentrations and volumetric flow rates, the sampling site shall be located prior to dilution of the vent gas stream and prior to release to the atmosphere;

(ii) For determining compliance with percent reduction requirements, sampling sites shall be located prior to the inlet of the control device and at the outlet of the control device; measurements shall be performed simultaneously at the two sampling sites; and

(iii) For determining compliance with concentration limits or mass emission rate limits, the sampling site shall be located at the outlet of the control device.

(2) No traverse site selection method is needed for vents smaller than 0.10 meter (4.0 inches) in diameter.

(3) The vent gas volumetric flow rate shall be determined using Method 2, 2A, 2C, or 2D of part 60, appendix A, as appropriate.

(4) The moisture content of the vent gas shall be measured using Method 4 of part 60, appendix A.

(5) To determine vent gas concentrations, the owner or operator shall conduct a minimum of three test runs that are representative of normal conditions and average the resulting pollutant concentrations using the following procedures.

(i) Method 308 in Appendix A of this part shall be used to determine the methanol concentration.

(ii) Except for the modifications specified in paragraphs (b)(5)(ii)(A) through (b)(5)(ii)(K) of this section, Method 26A of part 60, appendix A shall be used to determine chlorine concentration in the vent stream.

(A) Probe/Sampling Line. A separate probe is not required. The sampling line shall be an appropriate length of 0.64 cm (0.25 in) OD Teflon® tubing. The sample inlet end of the sampling line shall be inserted into the stack in such a way as to not entrain liquid condensation from the vent gases. The other end shall be connected to the impingers. The length of the tubing may vary from one sampling site to another, but shall be as short as possible in each situation. If sampling is conducted in sunlight, opaque tubing shall be used. Alternatively, if transparent tubing is used, it shall be covered with opaque tape.

(B) Impinger Train. Three 30 milliliter (ml) capacity midget impingers shall be connected in series to the sampling line. The impingers shall have regular tapered stems. Silica gel shall be placed in the third impinger as a desiccant. All impinger train connectors shall be glass and/or Teflon®.

(C) Critical orifice. The critical orifice shall have a flow rate of 200 to 250 ml/min and shall be followed by a vacuum pump capable of providing a vacuum of 640 millimeters of mercury (mm Hg). A 45 millimeter diameter in-line Teflon 0.8 micrometer filter shall follow the impingers to protect the critical orifice and vacuum pump.

(D) The following are necessary for the analysis apparatus:

- (1) Wash bottle filled with deionized water;
- (2) 25 or 50 ml graduated burette and stand;
- (3) Magnetic stirring apparatus and stir bar;
- (4) Calibrated pH Meter;
- (5) 150–250 ml beaker or flask; and
- (6) A 5 ml pipette.

(E) The procedures listed in paragraphs (b)(5)(ii)(E)(1) through (b)(5)(ii)(E)(7) of this section shall be used to prepare the reagents.

(1) To prepare the 1 molarity (M) potassium dihydrogen phosphate solution, dissolve 13.61 grams (g) of potassium dihydrogen phosphate in water and dilute to 100 ml.

(2) To prepare the 1 M sodium hydroxide solution (NaOH), dissolve 4.0 g of sodium hydroxide in water and dilute to 100 ml.

(3) To prepare the buffered 2 percent potassium iodide solution, dissolve 20 g of potassium iodide in 900 ml water. Add 50 ml of the 1 M potassium dihydrogen phosphate solution and 30 ml of the 1 M

sodium hydroxide solution. While stirring solution, measure the pH of solution electrometrically and add the 1 M sodium hydroxide solution to bring pH to between 6.95 and 7.05.

(4) To prepare the 0.1 normality (N) sodium thiosulfate solution, dissolve 25 g of sodium thiosulfate, pentahydrate, in 800 ml of freshly boiled and cooled distilled water in a 1-liter volumetric flask. Dilute to volume. To prepare the 0.01 N sodium thiosulfate solution, add 10.0 ml standardized 0.1 N sodium thiosulfate solution to a 100 ml volumetric flask, and dilute to volume with water.

(5) To standardize the 0.1 N sodium thiosulfate solution, dissolve 3.249 g of anhydrous potassium bi-iodate, primary standard quality, or 3.567 g potassium iodate dried at 103 ± 2 degrees Centigrade for 1 hour, in distilled water and dilute to 1000 ml to yield a 0.1000 N solution. Store in a glass-stoppered bottle. To 80 ml distilled water, add, with constant stirring, 1 ml concentrated sulfuric acid, 10.00 ml 0.1000 N anhydrous potassium bi-iodate, and 1 g potassium iodide. Titrate immediately with 0.1 N sodium thiosulfate titrant until the yellow color of the liberated iodine is almost discharged. Add 1 ml starch indicator solution and continue titrating until the blue color disappears. The normality of the sodium thiosulfate solution is inversely proportional to the ml of sodium thiosulfate solution consumed:



(6) To prepare the starch indicator solution, add a small amount of cold water to 5 g starch and grind in a mortar to obtain a thin paste. Pour paste into 1 L of boiling distilled water, stir, and let settle overnight. Use clear supernate for starch indicator solution.

(7) To prepare the 10 percent sulfuric acid solution, add 10 ml of concentrated sulfuric acid to 80 ml water in a 100 ml volumetric flask. Dilute to volume.

(F) The procedures specified in paragraphs (b)(5)(ii)(F)(1) through (b)(5)(ii)(F)(5) of this section shall be used to perform the sampling.

(1) Preparation of Collection Train. Measure 20 ml buffered potassium iodide solution into each of the first two impingers and connect probe, impingers, filter, critical orifice, and pump. The sampling line and the impingers shall be shielded from sunlight.

(2) Leak and Flow Check Procedure. Plug sampling line inlet tip and turn on pump. If a flow of bubbles is visible in either of the liquid impingers, tighten fittings and adjust connections and impingers. A leakage rate not in excess of 2 percent of the sampling rate is acceptable. Carefully remove the plug from the end of the probe. Check the flow rate at the probe inlet with a bubble tube flow meter. The flow should be comparable or slightly less than the flow rate of the critical orifice with the impingers off-line. Record the flow and turn off the pump.

(3) Sample Collection. Insert the sampling line into the stack and secure it with the tip slightly lower than the port height. Start the pump, recording the time. End the sampling after 60 minutes, or after yellow color is observed in the second in-line impinger. Record time and remove the tubing from the vent. Recheck flow rate at sampling line inlet and turn off pump. If the flow rate has changed significantly, redo sampling with fresh capture solution. A slight variation (less than 5 percent) in flow may be averaged. With the inlet end of the line elevated above the impingers, add about 5 ml water into the inlet tip to rinse the line into the first impinger.

(4) Sample Analysis. Fill the burette with 0.01 N sodium thiosulfate solution to the zero mark. Combine the contents of the impingers in the beaker or flask. Stir the solution and titrate with thiosulfate until the solution is colorless. Record the volume of the first endpoint (TN, ml). Add 5 ml of the 10 percent sulfuric acid solution, and continue the titration until the contents of the flask are again colorless. Record the total volume of titrant required to go through the first and to the second endpoint (TA, ml). If the volume of neutral titer is less than 0.5 ml, repeat the testing for a longer period of time. It is important that sufficient lighting be present to clearly see the endpoints, which are determined when the solution turns from pale yellow to colorless. A lighted stirring plate and a white background are useful for this purpose.

(5) Interferences. Known interfering agents of this method are sulfur dioxide and hydrogen peroxide. Sulfur dioxide, which is used to reduce oxidant residuals in some bleaching systems, reduces formed iodine to iodide in the capture solution. It is therefore a negative interference for chlorine, and in some cases could result in erroneous negative chlorine concentrations. Any agent capable of reducing iodine to iodide could interfere in this manner. A chromium trioxide impregnated filter will capture sulfur dioxide and pass chlorine and chlorine dioxide. Hydrogen peroxide, which is commonly used as a bleaching agent in modern bleaching systems, reacts with iodide to form iodine and thus can cause a positive interference in the chlorine measurement. Due to the chemistry involved, the precision of the chlorine analysis will decrease as the ratio of chlorine dioxide to chlorine increases. Slightly negative calculated concentrations of chlorine may occur when sampling a vent gas with high concentrations of chlorine dioxide and very low concentrations of chlorine.

(G) The following calculation shall be performed to determine the corrected sampling flow rate:

A red rectangular box with the text "Image Not Available" in white, serif font.

Where:

S_c =Corrected (dry standard) sampling flow rate, liters per minute;

S_u =Uncorrected sampling flow rate, L/min;

BP=Barometric pressure at time of sampling;

PW=Saturated partial pressure of water vapor, mm Hg at temperature; and

t=Ambient temperature, °C.

(H) The following calculation shall be performed to determine the moles of chlorine in the sample:

A red rectangular box with the text "Image Not Available" in white, serif font.

Where:

T_N =Volume neutral titer, ml;

T_A =Volume acid titer (total), ml; and

N_{Thio} =Normality of sodium thiosulfate titrant.

(I) The following calculation shall be performed to determine the concentration of chlorine in the sample:



Where:

S_C =Corrected (dry standard) sampling flow rate, liters per minute;

t_S =Time sampled, minutes;

T_N =Volume neutral titer, ml;

T_A =Volume acid titer (total), ml; and

N_{Thio} =Normality of sodium thiosulfate titrant.

(J) The following calculation shall be performed to determine the moles of chlorine dioxide in the sample:



Where:

T_A =Volume acid titer (total), ml;

T_N =Volume neutral titer, ml; and

N_{Thio} =Normality of sodium thiosulfate titrant.

(K) The following calculation shall be performed to determine the concentration of chlorine dioxide in the sample:



Where:

S_C =Corrected (dry standard) sampling flow rate, liters per minute;

t_S =Time sampled, minutes;

T_A =Volume acid titer (total), ml;

T_N =Volume neutral titer, ml; and

N_{Thio} =Normality of sodium thiosulfate titrant.

(iii) Any other method that measures the total HAP or methanol concentration that has been demonstrated to the Administrator's satisfaction.

(6) The minimum sampling time for each of the three test runs shall be 1 hour in which either an integrated sample or four grab samples shall be taken. If grab sampling is used, then the samples shall be taken at approximately equal intervals in time, such as 15 minute intervals during the test run.

(c) Liquid sampling locations and properties. For purposes of selecting liquid sampling locations and for determining properties of liquid streams such as wastewaters, process waters, and condensates required in §§63.444, 63.446, and 63.447, the owner or operator shall comply with the following procedures:

(1) Samples shall be collected using the sampling procedures of the test method listed in paragraph (c)(3) of this section selected to determine liquid stream HAP concentrations;

(i) Where feasible, samples shall be taken from an enclosed pipe prior to the liquid stream being exposed to the atmosphere; and

(ii) When sampling from an enclosed pipe is not feasible, samples shall be collected in a manner to minimize exposure of the sample to the atmosphere and loss of HAP compounds prior to sampling.

(2) The volumetric flow rate of the entering and exiting liquid streams shall be determined using the inlet and outlet flow meters or other methods demonstrated to the Administrator's satisfaction. The volumetric flow rate measurements to determine actual mass removal shall be taken at the same time as the concentration measurements.

(3) The owner or operator shall conduct a minimum of three test runs that are representative of normal conditions and average the resulting pollutant concentrations. The minimum sampling time for each test run shall be 1 hour and the grab or composite samples shall be taken at approximately equally spaced intervals over the 1-hour test run period. The owner or operator shall use one of the following procedures to determine total HAP or methanol concentration:

(i) Method 305 in Appendix A of this part, adjusted using the following equation:



Where:

C =Pollutant concentration for the liquid stream, parts per million by weight.

C_i =Measured concentration of pollutant i in the liquid stream sample determined using Method 305, parts per million by weight.

f_{m_i} =Pollutant-specific constant that adjusts concentration measured by Method 305 to actual liquid concentration; the f_m for methanol is 0.85. Additional pollutant f_m values can be found in table 34, subpart G of this part.

n =Number of individual pollutants, i , summed to calculate total HAP.

(ii) For determining methanol concentrations, NCASI Method DI/MEOH-94.02, Methanol in Process Liquids by GC/FID, August 1998, Methods Manual, NCASI, Research Triangle Park, NC. This test method is incorporated by reference in §63.14(f) of subpart A of this part.

(iii) Any other method that measures total HAP concentration that has been demonstrated to the Administrator's satisfaction.

(4) To determine soluble BOD₅ in the effluent stream from an open biological treatment unit used to comply with §§63.446(e)(2) and 63.453(j), the owner or operator shall use Method 405.1 of part 136 of this chapter with the following modifications:

(i) Filter the sample through the filter paper, into an Erlenmeyer flask by applying a vacuum to the flask sidearm. Minimize the time for which vacuum is applied to prevent stripping of volatile organics from the sample. Replace filter paper as often as needed in order to maintain filter times of less than approximately 30 seconds per filter paper. No rinsing of sample container or filter bowl into the Erlenmeyer flask is allowed.

(ii) Perform Method 405.1 on the filtrate obtained in paragraph (c)(4) of this section. Dilution water shall be seeded with 1 milliliter of final effluent per liter of dilution water. Dilution ratios may require adjustment to reflect the lower oxygen demand of the filtered sample in comparison to the total BOD₅. Three BOD bottles and different dilutions shall be used for each sample.

(5) If the test method used to determine HAP concentration indicates that a specific HAP is not detectable, the value determined as the minimum measurement level (MML) of the selected test method for the specific HAP shall be used in the compliance demonstration calculations. To determine the MML for a specific HAP using one of the test methods specified in paragraph (c)(3) of this section, one of the procedures specified in paragraphs (c)(5)(i) and (ii) of this section shall be performed. The MML for a particular HAP must be determined only if the HAP is not detected in the normal working range of the method.

(i) To determine the MML for a specific HAP, the following procedures shall be performed each time the method is set up. Set up is defined as the first time the analytical apparatus is placed in operation, after any shut down of 6 months or more, or any time a major component of the analytical apparatus is replaced.

(A) Select a concentration value for the specific HAP in question to represent the MML. The value of the MML selected shall not be below the calibration standard of the selected test method.

(B) Measure the concentration of the specific HAP in a minimum of three replicate samples using the selected test method. All replicate samples shall be run through the entire analytical procedure. The samples must contain the specific HAP at the selected MML concentration and should be representative of the liquid streams to be analyzed in the compliance demonstration. Spiking of the liquid samples with a known concentration of the target HAP may be necessary to ensure that the HAP concentration in the three replicate samples is at the selected MML. The concentration of the HAP in the spiked sample must be within 50 percent of the proposed MML for the demonstration to be valid. As an alternative to spiking, a field sample above the MML may be diluted to produce a HAP concentration at the MML. To be a valid demonstration, the diluted sample must have a HAP concentration within 20 percent of the proposed MML, and the field sample must not be diluted by more than a factor of five.

(C) Calculate the relative standard deviation (RSD) and the upper confidence limit at the 95 percent confidence level using the measured HAP concentrations determined in paragraph (c)(5)(i)(B) of this section. If the upper confidence limit of the RSD is less than 30 percent, then the selected MML is acceptable. If the upper confidence limit of the RSD is greater than or equal to 30 percent, then the selected MML is too low, and the procedures specified in paragraphs (c)(5)(i)(A) through (C) of this section must be repeated.

(ii) Provide for the Administrator's approval the selected value of the MML for a specific HAP and the rationale for selecting the MML including all data and calculations used to determine the MML. The approved MML must be used in all applicable compliance demonstration calculations.

(6) When using the MML determined using the procedures in paragraph (c)(5)(ii) of this section or when using the MML determined using the procedures in paragraph (c)(5)(i), except during set up, the analytical laboratory conducting the analysis must perform and meet the following quality assurance procedures each time a set of samples is analyzed to determine compliance.

(i) Using the selected test method, analyze in triplicate the concentration of the specific HAP in a representative sample. The sample must contain the specific HAP at a concentration that is within a factor of two of the MML. If there are no samples in the set being analyzed that contain the specific HAP at an appropriate concentration, then a sample below the MML may be spiked to produce the appropriate concentration, or a sample at a higher level may be diluted. After spiking, the sample must contain the specific HAP within 50 percent of the MML. If dilution is used instead, the diluted sample must contain the specific HAP within 20 percent of the MML and must not be diluted by more than a factor of five.

(ii) Calculate the RSD using the measured HAP concentrations determined in paragraph (c)(6)(i) of this section. If the RSD is less than 20 percent, then the laboratory is performing acceptably.

(d) Detectable leak procedures. To measure detectable leaks for closed-vent systems as specified in §63.450 or for pulping process wastewater collection systems as specified in §63.446(d)(2)(i), the owner or operator shall comply with the following:

(1) Method 21, of part 60, appendix A; and

(2) The instrument specified in Method 21 shall be calibrated before use according to the procedures specified in Method 21 on each day that leak checks are performed. The following calibration gases shall be used:

(i) Zero air (less than 10 parts per million by volume of hydrocarbon in air); and

(ii) A mixture of methane or n-hexane and air at a concentration of approximately, but less than, 10,000 parts per million by volume methane or n-hexane.

(e) Negative pressure procedures. To demonstrate negative pressure at process equipment enclosure openings as specified in §63.450(b), the owner or operator shall use one of the following procedures:

(1) An anemometer to demonstrate flow into the enclosure opening;

(2) Measure the static pressure across the opening;

(3) Smoke tubes to demonstrate flow into the enclosure opening; or

(4) Any other industrial ventilation test method demonstrated to the Administrator's satisfaction.

(f) HAP concentration measurements. For purposes of complying with the requirements in §§63.443, 63.444, and 63.447, the owner or operator shall measure the total HAP concentration as one of the following:

(1) As the sum of all individual HAPs; or

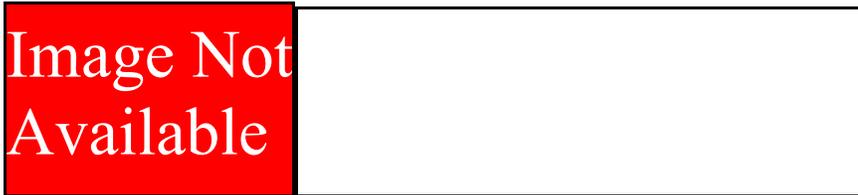
(2) As methanol.

(g) Condensate HAP concentration measurement. For purposes of complying with the kraft pulping condensate requirements in §63.446, the owner or operator shall measure the total HAP concentration as methanol. For biological treatment systems complying with §63.446(e)(2), the owner or operator shall measure total HAP as acetaldehyde, methanol, methyl ethyl ketone, and propionaldehyde and follow the procedures in §63.457(l)(1) or (2).

(h) Bleaching HAP concentration measurement. For purposes of complying with the bleaching system requirements in §63.445, the owner or operator shall measure the total HAP concentration as the sum of all individual chlorinated HAPs or as chlorine.

(i) Vent gas stream calculations. To demonstrate compliance with the mass emission rate, mass emission rate per megagram of ODP, and percent reduction requirements for vent gas streams specified in §§63.443, 63.444, 63.445, and 63.447, the owner or operator shall use the following:

(1) The total HAP mass emission rate shall be calculated using the following equation:



Where:

E=Mass emission rate of total HAP from the sampled vent, kilograms per hour.

K_2 =Constant, 2.494×10^{-6} (parts per million by volume)⁻¹ (gram-mole per standard cubic meter) (kilogram/gram) (minutes/hour), where standard temperature for (gram-mole per standard cubic meter) is 20 °C.

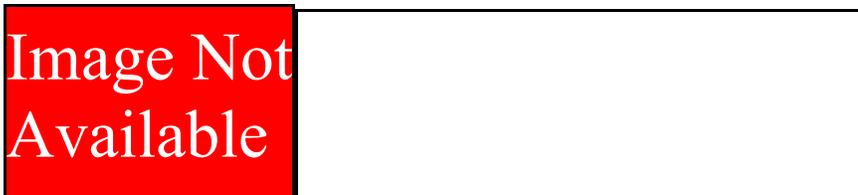
C_j =Concentration on a dry basis of pollutant j in parts per million by volume as measured by the test methods specified in paragraph (b) of this section.

M_j =Molecular weight of pollutant j, gram/gram-mole.

Q_s =Vent gas stream flow rate (dry standard cubic meter per minute) at a temperature of 20 °C as indicated in paragraph (b) of this section.

n=Number of individual pollutants, i, summed to calculate total HAP.

(2) The total HAP mass emission rate per megagram of ODP shall be calculated using the following equation:



Where:

F=Mass emission rate of total HAP from the sampled vent, in kilograms per megagram of ODP.

E=Mass emission rate of total HAP from the sampled vent, in kilograms per hour determined as specified in paragraph (i)(1) of this section.

P=The production rate of pulp during the sampling period, in megagrams of ODP per hour.

(3) The total HAP percent reduction shall be calculated using the following equation:



Where:

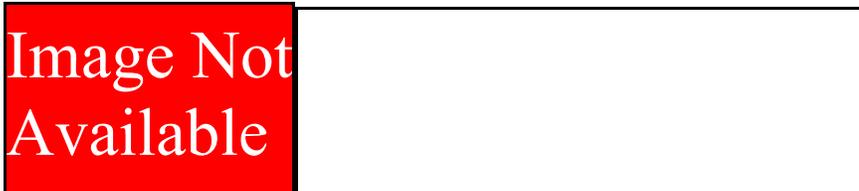
R=Efficiency of control device, percent.

E_i=Inlet mass emission rate of total HAP from the sampled vent, in kilograms of pollutant per hour, determined as specified in paragraph (i)(1) of this section.

E_o=Outlet mass emission rate of total HAP from the sampled vent, in kilograms of pollutant per hour, determined as specified in paragraph (i)(1) of this section.

(j) Liquid stream calculations. To demonstrate compliance with the mass flow rate, mass per megagram of ODP, and percent reduction requirements for liquid streams specified in §63.446, the owner or operator shall use the following:

(1) The mass flow rates of total HAP or methanol entering and exiting the treatment process shall be calculated using the following equations:



Where:

E_b=Mass flow rate of total HAP or methanol in the liquid stream entering the treatment process, kilograms per hour.

E_a=Mass flow rate of total HAP or methanol in the liquid exiting the treatment process, kilograms per hour.

K=Density of the liquid stream, kilograms per cubic meter.

V_{bi}=Volumetric flow rate of liquid stream entering the treatment process during each run i, cubic meters per hour, determined as specified in paragraph (c) of this section.

V_{ai}=Volumetric flow rate of liquid stream exiting the treatment process during each run i, cubic meters per hour, determined as specified in paragraph (c) of this section.

C_{bi}=Concentration of total HAP or methanol in the stream entering the treatment process during each run i, parts per million by weight, determined as specified in paragraph (c) of this section.

C_{ai}=Concentration of total HAP or methanol in the stream exiting the treatment process during each run i, parts per million by weight, determined as specified in paragraph (c) of this section.

n=Number of runs.

(2) The mass of total HAP or methanol per megagram ODP shall be calculated using the following equation:



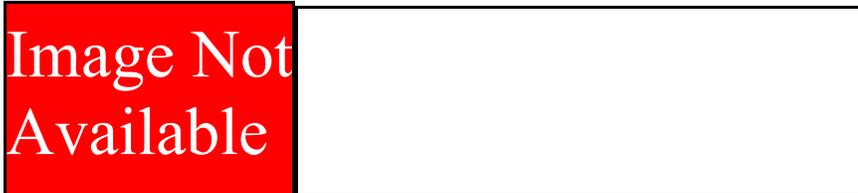
Where:

F=Mass loading of total HAP or methanol in the sample, in kilograms per megagram of ODP.

E_a =Mass flow rate of total HAP or methanol in the wastewater stream in kilograms per hour as determined using the procedures in paragraph (j)(1) of this section.

P=The production rate of pulp during the sampling period in megagrams of ODP per hour.

(3) The percent reduction of total HAP across the applicable treatment process shall be calculated using the following equation:



Where:

R=Control efficiency of the treatment process, percent.

E_b =Mass flow rate of total HAP in the stream entering the treatment process, kilograms per hour, as determined in paragraph (j)(1) of this section.

E_a =Mass flow rate of total HAP in the stream exiting the treatment process, kilograms per hour, as determined in paragraph (j)(1) of this section.

(4) Compounds that meet the requirements specified in paragraphs (j)(4)(i) or (4)(ii) of this section are not required to be included in the mass flow rate, mass per megagram of ODP, or the mass percent reduction determinations.

(i) Compounds with concentrations at the point of determination that are below 1 part per million by weight; or

(ii) Compounds with concentrations at the point of determination that are below the lower detection limit where the lower detection limit is greater than 1 part per million by weight.

(k) Oxygen concentration correction procedures. To demonstrate compliance with the total HAP concentration limit of 20 ppmv in §63.443(d)(2), the concentration measured using the methods specified in paragraph (b)(5) of this section shall be corrected to 10 percent oxygen using the following procedures:

(1) The emission rate correction factor and excess air integrated sampling and analysis procedures of Methods 3A or 3B of part 60, appendix A shall be used to determine the oxygen concentration. The samples shall be taken at the same time that the HAP samples are taken.

(2) The concentration corrected to 10 percent oxygen shall be computed using the following equation:

Image Not Available

Where:

C_c = Concentration of total HAP corrected to 10 percent oxygen, dry basis, parts per million by volume.

C_m = Concentration of total HAP dry basis, parts per million by volume, as specified in paragraph (b) of this section.

$\%O_{2d}$ = Concentration of oxygen, dry basis, percent by volume.

(l) Biological treatment system percent reduction and mass removal calculations. To demonstrate compliance with the condensate treatment standards specified in §63.446(e)(2) and the monitoring requirements specified in §63.453(j)(3) using a biological treatment system, the owner or operator shall use one of the procedures specified in paragraphs (1)(1) and (2) of this section. Owners or operators using a nonthoroughly mixed open biological treatment system shall also comply with paragraph (1)(3) of this section.

(1) Percent reduction methanol procedure. For the purposes of complying with the condensate treatment requirements specified in §63.446(e)(2) and (3), the methanol percent reduction shall be calculated using the following equations:

Image Not Available

Where:

R = Percent destruction.

$f_{bio}(\text{MeOH})$ = The fraction of methanol removed in the biological treatment system. The site-specific biorate constants shall be determined using the appropriate procedures specified in appendix C of this part.

r = Ratio of the sum of acetaldehyde, methyl ethyl ketone, and propionaldehyde mass to methanol mass.

F(nonmethanol) = The sum of acetaldehyde, methyl ethyl ketone, and propionaldehyde mass flow rates (kg/Mg ODP) entering the biological treatment system determined using the procedures in paragraph (j)(2) of this section.

F(methanol) = The mass flow rate (kg/Mg ODP) of methanol entering the system determined using the procedures in paragraph (j)(2) of this section.

(2) Mass removal methanol procedure. For the purposes of complying with the condensate treatment requirements specified in §63.446(e)(2) and (4), or §63.446(e)(2) and (5), the methanol mass removal shall be calculated using the following equation:

Image Not
Available

Where:

F = Methanol mass removal (kg/Mg ODP).

F_b = Inlet mass flow rate of methanol (kg/Mg ODP) determined using the procedures in paragraph (j)(2) of this section.

$f_{bio}(\text{MeOH})$ = The fraction of methanol removed in the biological treatment system. The site-specific biorate constants shall be determined using the appropriate procedures specified in appendix C of this part.

r = Ratio of the sum of acetaldehyde, methyl ethyl ketone, and propionaldehyde mass to methanol mass determined using the procedures in paragraph (1) of this section.

(3) The owner or operator of a nonthoroughly mixed open biological treatment system using the monitoring requirements specified in §63.453(p)(3) shall follow the procedures specified in section III.B.1 of appendix E of this part to determine the borate constant, K_s , and characterize the open biological treatment system during the initial and any subsequent performance tests.

(m) Condensate segregation procedures. The following procedures shall be used to demonstrate compliance with the condensate segregation requirements specified in §63.446(c).

(1) To demonstrate compliance with the percent mass requirements specified in §63.446(c)(2), the procedures specified in paragraphs (m)(1)(i) through (iii) of this section shall be performed.

(i) Determine the total HAP mass of all condensates from each equipment system listed in §63.446(b)(1) through (b)(3) using the procedures specified in paragraphs (c) and (j) of this section.

(ii) Multiply the total HAP mass determined in paragraph (m)(1)(i) of this section by 0.65 to determine the target HAP mass for the high-HAP fraction condensate stream or streams.

(iii) Compliance with the segregation requirements specified in §63.446(c)(2) is demonstrated if the condensate stream or streams from each equipment system listed in §63.446(b)(1) through (3) being treated as specified in §63.446(e) contain at least as much total HAP mass as the target total HAP mass determined in paragraph (m)(1)(ii) of this section.

(2) To demonstrate compliance with the percent mass requirements specified in §63.446(c)(3), the procedures specified in paragraphs (m)(2)(i) through (ii) of this section shall be performed.

(i) Determine the total HAP mass contained in the high-HAP fraction condensates from each equipment system listed in §63.446(b)(1) through (b)(3) and the total condensates streams from the equipment systems listed in §63.446(b)(4) and (b)(5), using the procedures specified in paragraphs (c) and (j) of this section.

(ii) Compliance with the segregation requirements specified in §63.446(c)(3) is demonstrated if the total HAP mass determined in paragraph (m)(2)(i) of this section is equal to or greater than the appropriate mass requirements specified in §63.446(c)(3).

(n) Open biological treatment system monitoring sampling storage. The inlet and outlet grab samples required to be collected in §63.453(j)(1)(ii) shall be stored at 4 °C (40 °F) to minimize the biodegradation of the organic compounds in the samples.

[63 FR 18617, Apr. 15, 1998, as amended at 64 FR 17564, Apr. 12, 1999; 65 FR 80763, Dec. 22, 2000; 66 FR 24269, May 14, 2001]

§ 63.458 Implementation and enforcement.

(a) This subpart can be implemented and enforced by the U.S. EPA, or a delegated authority such as the applicable State, local, or Tribal agency. If the U.S. EPA Administrator has delegated authority to a State, local, or Tribal agency, then that agency, in addition to the U.S. EPA, has the authority to implement and enforce this subpart. Contact the applicable U.S. EPA Regional Office to find out if this subpart is delegated to a State, local, or Tribal agency.

(b) In delegating implementation and enforcement authority of this subpart to a State, local, or Tribal agency under subpart E of this part, the authorities contained in paragraph (c) of this section are retained by the Administrator of U.S. EPA and cannot be transferred to the State, local, or Tribal agency.

(c) The authorities that cannot be delegated to State, local, or Tribal agencies are as specified in paragraphs (c)(1) through (4) of this section.

(1) Approval of alternatives to the requirements in §§63.440, 63.443 through 63.447 and 63.450. Where these standards reference another subpart, the cited provisions will be delegated according to the delegation provisions of the referenced subpart.

(2) Approval of alternatives to using §§63.457(b)(5)(iii), 63.457(c)(3)(ii) through (iii), and 63.257(c)(5)(ii), and any major alternatives to test methods under §63.7(e)(2)(ii) and (f), as defined in §63.90, and as required in this subpart.

(3) Approval of alternatives using §64.453(m) and any major alternatives to monitoring under §63.8(f), as defined in §63.90, and as required in this subpart.

(4) Approval of major alternatives to recordkeeping and reporting under §63.10(f), as defined in §63.90, and as required in this subpart.

[68 FR 37348, June 23, 2003]

§ 63.459 Alternative standards.

(a) Flint River Mill. The owner or operator of the pulping system using the kraft process at the manufacturing facility, commonly called Weyerhaeuser Company Flint River Operations, at Old Stagecoach Road, Oglethorpe, Georgia, (hereafter the Site) shall comply with all provisions of this subpart, except as specified in paragraphs (a)(1) through (a)(5) of this section.

(1) The owner or operator of the pulping system is not required to control total HAP emissions from equipment systems specified in paragraphs (a)(1)(i) and (a)(1)(ii) if the owner or operator complies with paragraphs (a)(2) through (a)(5) of this section.

(i) The brownstock diffusion washer vent and first stage brownstock diffusion washer filtrate tank vent in the pulp washing system specified in §63.443(a)(1)(iii).

(ii) The oxygen delignification system specified in §63.443(a)(1)(v).

(2) The owner or operator of the pulping system shall control total HAP emissions from equipment systems listed in paragraphs (a)(2)(i) through (a)(2)(ix) of this section as specified in §63.443(c) and (d) of this subpart no later than April 16, 2002.

- (i) The weak liquor storage tank;
- (ii) The boilout tank;
- (iii) The utility tank;
- (iv) The fifty percent solids black liquor storage tank;
- (v) The south sixty-seven percent solids black liquor storage tank;
- (vi) The north sixty-seven percent solids black liquor storage tank;
- (vii) The precipitator make down tanks numbers one, two and three;
- (viii) The salt cake mix tank; and
- (ix) The NaSH storage tank.

(3) The owner and operator of the pulping system shall operate the Isothermal Cooking system at the site while pulp is being produced in the continuous digester at any time after April 16, 2002.

(i) The owner or operator shall monitor the following parameters to demonstrate that isothermal cooking is in operation:

(A) Continuous digester dilution factor; and

(B) The difference between the continuous digester vapor zone temperature and the continuous digester extraction header temperature.

(ii) The isothermal cooking system shall be in operation when the continuous digester dilution factor and the temperature difference between the continuous digester vapor zone temperature and the continuous digester extraction header temperature are maintained as set forth in Table 2:

Table 2 to Subpart S_Isothermal Cooking System Operational Values

Parameter	Instrument number	Limit	Units
Digester Dilution Factor.....	K1DILFAC.....	>0.0.....	None
Difference in Digester Vapor Zone Temperature and Digester.	03TI0311.....	<10.....	Degrees F.
Extraction Header Temperature.....	03TI0329.....		

(iii) The owner or operator shall certify annually the operational status of the isothermal cooking system.

(4) [Reserved]

(5) Definitions. All descriptions and references to equipment and emission unit ID numbers refer to equipment at the Site. All terms used in this paragraph shall have the meaning given them in this part and this paragraph. For the purposes of this paragraph only the following additional definitions apply:

Boilout tank means the tank that provides tank storage capacity for recovery of black liquor spills and evaporator water washes for return to the evaporators (emission unit ID No. U606);

Brownstock diffusion washer means the equipment used to wash pulp from the surge chests to further reduce lignin carryover in the pulp;

Continuous digester means the digester system used to chemically and thermally remove the lignin binding the wood chips to produce individual pulp fibers (emission unit ID No. P300);

Fifty percent solids black liquor storage tank means the tank used to store intermediate black liquor prior to final evaporation in the 1A, 1B, and 1C Concentrators (emission unit ID No. U605);

First stage brownstock diffusion washer means the equipment that receives and stores filtrate from the first stage of washing for return to the pressure diffusion washer;

Isothermal cooking system means the 1995–1996 modernization of brownstock pulping process including conversion of the Kamyrr continuous vapor phase digester to an extended delignification unit and changes in the knotting, screening, and oxygen stage systems:

NaSH storage tank means the tank used to store sodium hydrosulfite solution prior to use as make-up to the liquor system

North sixty-seven percent solids black liquor storage tank means one of two tanks used to store black liquor prior to burning in the Recovery Boiler for chemical recovery (emission unit ID No. U501);

Precipitator make down tank numbers one, two and three mean tanks used to mix collected particulate from electrostatic precipitator chamber number one with 67% black liquor for recycle to chemical recovery in the Recovery Boiler (emission unit ID Nos. U504, U505 and U506);

Salt cake mix tank means the tank used to mix collected particulate from economizer hoppers with black liquor for recycle to chemical recovery in the Recovery Boiler (emission unit ID No. U503);

South sixty-seven percent solids black liquor storage tank means one of two tanks used to store black liquor prior to burning in the Recovery Boiler for chemical recovery (emission unit ID No. U502);

Utility tank means the tank used to store fifty percent liquor and, during black liquor tank inspections and repairs, to serve as a backup liquor storage tank (emission unit ID No. U611);

Weak gas system means high volume, low concentration or HVLC system as defined in §63.441; and

Weak liquor storage tank means the tank that provide surge capacity for weak black liquor from digesting prior to feed to multiple effect evaporators (emission unit ID No. U610).

(b) Tomahawk Wisconsin Mill. (1) Applicability. (i) The provisions of this paragraph (b) apply to the owner or operator of the stand-alone semi-chemical pulp and paper mill located at N9090 County Road E in Tomahawk, Wisconsin, referred to as the Tomahawk Mill.

(ii) The owner or operator is not required to comply with the provisions of this paragraph (b) if the owner and operator chooses to comply with the otherwise applicable sections of this subpart and provides the EPA with notice.

(iii) If the owner or operator chooses to comply with the provisions of this paragraph (b) the owner or operator shall comply with all applicable provisions of this part, including this subpart, except the following:

(A) Section 63.443(b);

(B) Section 63.443(c); and

(C) Section 63.443(d).

(2) Collection and routing of HAP emissions. (i) The owner or operator shall collect the total HAP emissions from each LVHC system.

(ii) Each LVHC system shall be enclosed and the HAP emissions shall be vented into a closed-vent system. The enclosures and closed-vent system shall meet requirements specified in paragraph (b)(6) of this section.

(iii) The HAP emissions shall be routed as follows:

(A) The HAP emissions collected in the closed-vent system from the digester system shall be routed through the primary indirect contact condenser, secondary indirect contact condenser, and evaporator indirect contact condenser; and

(B) The HAP emissions collected in the closed-vent system from the evaporator system and foul condensate standpipe shall be routed through the evaporator indirect contact condenser.

(3) Collection and routing of pulping process condensates. (i) The owner or operator shall collect the pulping process condensates from the following equipment systems:

(A) Primary indirect contact condenser;

(B) Secondary indirect contact condenser; and

(C) Evaporator indirect contact condenser.

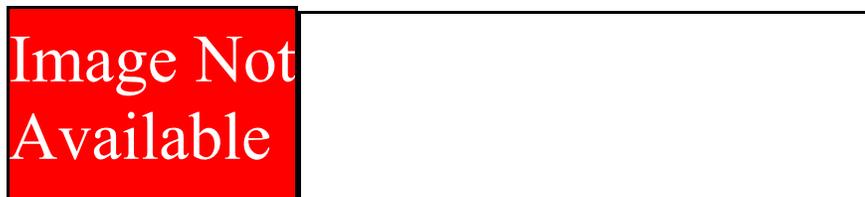
(ii) The collected pulping process condensates shall be conveyed in a closed collection system that is designed and operated to meet the requirements specified in paragraph (b)(7) of this section.

(iii) The collected pulping process condensates shall be routed in the closed collection system to the wastewater treatment plant anaerobic basins for biodegradation.

(iv) The pulping process condensates shall be discharged into the wastewater treatment plant anaerobic basins below the liquid surface of the wastewater treatment plant anaerobic basins.

(4) HAP destruction efficiency requirements of the wastewater treatment plant. (i) The owner or operator shall achieve a destruction efficiency of at least one pound of HAPs per ton of ODP by biodegradation in the wastewater treatment plant.

(ii) The following calculation shall be performed to determine the HAP destruction efficiency by biodegradation in the wastewater treatment plant:



Where:

HAP_d = HAP destruction efficiency of wastewater treatment plant (pounds of HAPs per ton of ODP);

RME_{fr} = flow rate of raw mill effluent (millions of gallons per day);

RME_c = HAP concentration of raw mill effluent (milligrams per liter);

PPC_{fr} = flow rate of pulping process condensates (millions of gallons per day);

PPC_c = HAP concentration of pulping process condensates (milligrams per liter);

ABD_{fr} = flow rate of anaerobic basin discharge (millions of gallons per day);

ABD_c = HAP concentration of anaerobic basin discharge (milligrams per liter); and

ODP_r = rate of production of oven dried pulp (tons per day).

(5) Monitoring requirements and parameter ranges. (i) The owner or operator shall install, calibrate, operate, and maintain according to the manufacturer's specifications a continuous monitoring system (CMS, as defined in §63.2), using a continuous recorder, to monitor the following parameters:

(A) Evaporator indirect contact condenser vent temperature;

(B) Pulping process condensates flow rate;

(C) Wastewater treatment plant effluent flow rate; and

(D) Production rate of ODP.

(ii) The owner or operator shall additionally monitor, on a daily basis, in each of the four anaerobic basins, the ratio of volatile acid to alkalinity (VA/A ratio). The owner or operator shall use the test methods identified for determining acidity and alkalinity as specified in 40 CFR 136.3, Table 1B.

(iii) The temperature of the evaporator indirect contact condenser vent shall be maintained at or below 140 °F on a continuous basis.

(iv) The VA/A ratio in each of the four anaerobic basins shall be maintained at or below 0.5 on a continuous basis.

(A) The owner or operator shall measure the methanol concentration of the outfall of any basin (using NCASI Method DI/MEOH 94.03) when the VA/A ratio of that basin exceeds the following:

(1) 0.38, or

(2) The highest VA/A ratio at which the outfall of any basin has previously measured non-detect for methanol (using NCASI Method DI/MEOH 94.03).

(B) If the outfall of that basin measures detect for methanol, the owner or operator shall verify compliance with the emission standard specified in paragraph (b)(4) of this section by conducting a performance test pursuant to the requirements specified in paragraph (b)(8) of this section.

(v) The owner or operator may seek to establish or reestablish the parameter ranges, and/or the parameters required to be monitored as provided in paragraphs (b)(5)(i) through (v) of this section, by following the provisions of §63.453(n)(1) through (4).

(6) Standards and monitoring requirements for each enclosure and closed-vent system.

(i) The owner or operator shall comply with the design and operational requirements specified in paragraphs (b)(6)(ii) through (iv) of this section, and the monitoring requirements of paragraphs (b)(6)(v) through (x) of this section for each enclosure and closed-vent system used for collecting and routing of HAP emissions as specified in paragraph (b)(2) of this section.

(ii) Each enclosure shall be maintained at negative pressure at each enclosure or hood opening as demonstrated by the procedures specified in §63.457(e). Each enclosure or hood opening closed during the initial performance test shall be maintained in the same closed and sealed position as during the performance test at all times except when necessary to use the opening for sampling, inspection, maintenance, or repairs.

(iii) Each component of the closed-vent system that is operated at positive pressure shall be designed for and operated with no detectable leaks as indicated by an instrument reading of less than 500 parts per million by volume above background, as measured by the procedures specified in §63.457(d).

(iv) Each bypass line in the closed-vent system that could divert vent streams containing HAPs to the atmosphere without meeting the routing requirements specified in paragraph (b)(2) of this section shall comply with either of the following requirements:

(A) On each bypass line, the owner or operator shall install, calibrate, maintain, and operate according to the manufacturer's specifications a flow indicator that provides a record of the presence of gas stream flow in the bypass line at least once every 15 minutes. The flow indicator shall be installed in the bypass line in such a way as to indicate flow in the bypass line; or

(B) For bypass line valves that are not computer controlled, the owner or operator shall maintain the bypass line valve in the closed position with a car seal or seal placed on the valve or closure mechanism in such a way that the valve or closure mechanism cannot be opened without breaking the seal.

(v) For each enclosure opening, the owner or operator shall perform, at least once every 30 days, a visual inspection of the closure mechanism specified in paragraph (b)(6)(ii) of this section to ensure the opening is maintained in the closed position and sealed.

(vi) For each closed-vent system required by paragraph (b)(2) of this section, the owner or operator shall perform a visual inspection every 30 days and at other times as requested by the Administrator. The visual inspection shall include inspection of ductwork, piping, enclosures, and connections to covers for visible evidence of defects.

(vii) For positive pressure closed-vent systems, or portions of closed-vent systems, the owner or operator shall demonstrate no detectable leaks as specified in paragraph (b)(6)(iii) of this section, measured initially and annually by the procedures in §63.457(d).

(viii) For each enclosure that is maintained at negative pressure, the owner or operator shall demonstrate initially and annually that it is maintained at negative pressure as specified in §63.457(e).

(ix) For each valve or closure mechanism as specified in paragraph (b)(6)(iv)(B) of this section, the owner or operator shall perform an inspection at least once every 30 days to ensure that the valve is maintained in the closed position and the emissions point gas stream is not diverted through the bypass line.

(x) If an inspection required by paragraph (b)(6) of this section identifies visible defects in ductwork, piping, enclosures, or connections to covers required by paragraph (b)(6) of this section, or if an instrument reading of 500 parts per million by volume or greater above background is measured, or if the enclosure openings are not maintained at negative pressure, then the following corrective actions shall be taken as soon as follows:

(A) A first effort to repair or correct the closed-vent system shall be made as soon as practicable but no later than 5 calendar days after the problem is identified.

(B) The repair or corrective action shall be completed no later than 15 calendar days after the problem is identified.

(7) Standards and monitoring requirements for the pulping process condensates closed collection system. (i) The owner or operator shall comply with the design and operational requirements specified in paragraphs (b)(7)(ii) through (iii) of this section, and monitoring requirements of paragraph (b)(7)(iv) for the equipment systems in paragraph (b)(3) of this section used to route the pulping process condensates in a closed collection system.

(ii) Each closed collection system shall meet the individual drain system requirements specified in §§63.960, 63.961, and 63.962, except that the closed vent systems shall be designed and operated in accordance with paragraph (b)(6) of this section, instead of in accordance with §63.693 as specified in §63.692(a)(3)(ii), (b)(3)(ii)(A), and (b)(3)(ii)(B)(5)(iii); and

(iii) If a condensate tank is used in the closed collection system, the tank shall meet the following requirements:

(A) The fixed roof and all openings (e.g., access hatches, sampling ports, gauge wells) shall be designed and operated with no detectable leaks as indicated by an instrument reading of less than 500 parts per million above background, and vented into a closed-vent system that meets the requirements of paragraph (b)(6) of this section and routed in accordance with paragraph (b)(2) of this section; and

(B) Each opening shall be maintained in a closed, sealed position (e.g., covered by a lid that is gasketed and latched) at all times that the tank contains pulping process condensates or any HAPs removed from a pulping process condensate stream except when it is necessary to use the opening for sampling, removal, or for equipment inspection, maintenance, or repair.

(iv) For each pulping process condensate closed collection system used to comply with paragraph (b)(3) of this section, the owner or operator shall perform a visual inspection every 30 days and shall comply with the inspection and monitoring requirements specified in §63.964 except for the closed-vent system and control device inspection and monitoring requirements specified in §63.964(a)(2).

(8) Quarterly performance testing. (i) The owner or operator shall, within 45 days after the beginning of each quarter, conduct a performance test.

(ii) The owner or operator shall use NCASI Method DI/HAPS–99.01 to collect a grab sample and determine the HAP concentration of the Raw Mill Effluent, Pulping Process Condensates, and Anaerobic Basin Discharge for the quarterly performance test conducted during the first quarter each year.

(iii) For each of the remaining three quarters, the owner or operator may use NCASI Method DI/MEOH 94.03 as a surrogate to collect and determine the HAP concentration of the Raw Mill Effluent, Pulping Process Condensates, and Anaerobic Basin Discharge.

(iv) The sample used to determine the HAP or Methanol concentration in the Raw Mill Effluent, Pulping Process Condensates, or Anaerobic Basin Discharge shall be a composite of four grab samples taken evenly spaced over an eight hour time period.

(v) The Raw Mill Effluent grab samples shall be taken from the raw mill effluent composite sampler.

(vi) The Pulping Process Condensates grab samples shall be taken from a line tap on the closed condensate collection system prior to discharge into the wastewater treatment plant.

(vii) The Anaerobic Basic Discharge grab samples shall be taken subsequent to the confluence of the four anaerobic basin discharges.

(viii) The flow rate of the Raw Mill Effluent, Pulping Process Condensates, and Anaerobic Basin Discharge, and the production rate of ODP shall be averaged over eight hours.

(ix) The data collected as specified in paragraphs (b)(5) and (b)(8) of this section shall be used to determine the HAP destruction efficiency of the wastewater treatment plant as specified in paragraph (b)(4)(ii) of this section.

(x) The HAP destruction efficiency shall be at least as great as that specified by paragraph (b)(4)(i) of this section.

(9) Recordkeeping requirements. (i) The owner or operator shall comply with the recordkeeping requirements as specified in Table 1 of subpart S of part 63 as it pertains to §63.10.

(ii) The owner or operator shall comply with the recordkeeping requirements as specified in §63.454(b).

(iii) The owner or operator shall comply with the recordkeeping requirements as specified in §63.453(d).

(10) Reporting requirements. (i) Each owner or operator shall comply with the reporting requirements as specified in Table 1 of §63.10.

(ii) Each owner or operator shall comply with the reporting requirements as specified in §63.455(d).

(11) Violations. (i) Failure to comply with any applicable provision of this part shall constitute a violation.

(ii) Periods of excess emissions shall not constitute a violation provided the time of excess emissions (excluding periods of startup, shutdown, or malfunction) divided by the total process operating time in a semi-annual reporting period does not exceed one percent. All periods of excess emission (including periods of startup, shutdown, and malfunction) shall be reported, and shall include:

(A) Failure to monitor a parameter, or maintain a parameter within minimum or maximum (as appropriate) ranges as specified in paragraph (b)(5), (b)(6), or (b)(7) of this section; and

(B) Failure to meet the HAP destruction efficiency standard specified in paragraph (b)(4) of this section.

(iii) Notwithstanding paragraph (b)(11)(ii) of this section, any excess emissions that present an imminent threat to public health or the environment, or may cause serious harm to public health or the environment, shall constitute a violation.

[66 FR 34124, June 27, 2001, as amended at 66 FR 52538, Oct. 16, 2001; 69 FR 19740, Apr. 13, 2004]

Table 1 to Subpart S of Part 63—General Provisions Applicability to Subpart S ^a

Reference	Applies to Subpart S	Comment
63.1(a)(1)-(3)	Yes	
63.1(a)(4)	Yes	
63.1(a)(5)	No	
63.1(a)(6)-(8)	Yes	
63.1(a)(9)	No	Section reserved.
63.1(a)(10)	No	Subpart S and other cross-referenced

Subpart S (this table) specifies applicability of each paragraph in subpart A to subpart S. Section reserved.

Section reserved.

Subpart S and other cross-referenced

		subparts specify calendar or operating day.
63.1(a)(11)-(14).....	Yes	
63.1(b)(1).....	No	Subpart S specifies its own applicability.
63.1(b)(2)-(3).....	Yes	
63.1(c)(1)-(2).....	Yes	
63.1(c)(3).....	No	Section reserved.
63.1(c)(4)-(5).....	Yes	
63.1(d).....	No	Section reserved.
63.1(e).....	Yes	
63.2.....	Yes	
63.3.....	Yes	
63.4(a)(1).....	Yes	
63.4(a)(3).....		
63.4(a)(4).....	No	Section reserved.
63.4(a)(5).....	Yes	
63.4(b).....	Yes	
63.4(c).....	Yes	
63.5(a).....	Yes	
63.5(b)(1).....	Yes	
63.5(b)(2).....	No	Section reserved.
63.5(b)(3).....	Yes	
63.5(b)(4)-(6).....	Yes	
63.5(c).....	No	Section reserved.
63.5(d).....	Yes	
63.5(e).....	Yes	
63.5(f).....	Yes	
63.6(a).....	Yes	
63.6(b).....	No	Subpart S specifies compliance dates for sources subject to subpart S.
63.6(c).....	No	Subpart S specifies compliance dates for sources subject to subpart S.
63.6(d).....	No	Section reserved.
63.6(e).....	Yes	
63.6(f).....	Yes	
63.6(g).....	Yes	
63.6(h).....	No	Pertains to continuous opacity monitors that are not part of this standard.
63.6(i).....	Yes	
63.6(j).....	Yes	
63.7.....	Yes	
63.8(a)(1).....	Yes	
63.8(a)(2).....	Yes	
63.8(a)(3).....	No	Section reserved.
63.8(a)(4).....	Yes	
63.8(b)(1).....	Yes	
63.8(b)(2).....	No	Subpart S specifies locations to conduct monitoring.
63.8(b)(3).....	Yes	
63.8(c)(1).....	Yes	
63.8(c)(2).....	Yes	
63.8(c)(3).....	Yes	
63.8(c)(4).....	No	Subpart S allows site specific determination of monitoring frequency in § 63.453(n)(4).
63.8(c)(5).....	No	Pertains to continuous opacity monitors that are not part of this standard.
63.8(c)(6).....	Yes	
63.8(c)(7).....	Yes	
63.8(c)(8).....	Yes	
63.8(d).....	Yes	
63.8(e).....	Yes	
63.8(f)(1)-(5).....	Yes	
63.8(f)(6).....	No	Subpart S does not specify relative accuracy test for CEMs.
63.8(g).....	Yes	
63.9(a).....	Yes	
63.9(b).....	Yes	Initial notifications must be submitted within one year after the source becomes subject to the relevant standard.
63.9(c).....	Yes	
63.9(d).....	No	Special compliance requirements are only applicable to kraft mills.
63.9(e).....	Yes	

63.9(f).....	No	Pertains to continuous opacity monitors that are not part of this standard.
63.9(g)(1).....	Yes	
63.9(g)(2).....	No	Pertains to continuous opacity monitors that are not part of this standard.
63.9(g)(3).....	No	Subpart S does not specify relative accuracy tests, therefore no notification is required for an alternative.
63.9(h).....	Yes	
63.9(i).....	Yes	
63.9(j).....	Yes	
63.10(a).....	Yes	
63.10(b).....	Yes	
63.10(c).....	Yes	
63.10(d)(1).....	Yes	
63.10(d)(2).....	Yes	
63.10(d)(3).....	No	Pertains to continuous opacity monitors that are not part of this standard.
63.10(d)(4).....	Yes	
63.10(d)(5).....	Yes	
63.10(e)(1).....	Yes	
63.10(e)(2)(i).....	Yes	
63.10(e)(2)(ii).....	No	Pertains to continuous opacity monitors that are not part of this standard.
63.10(e)(3).....	Yes	
63.10(e)(4).....	No	Pertains to continuous opacity monitors that are not part of this standard.
63.10(f).....	Yes	
63.11-63.15.....	Yes	

a Wherever subpart A specifies ``postmark'' dates, submittals may be sent by methods other than the U.S. Mail (e.g., by fax or courier). Submittals shall be sent by the specified dates, but a postmark is not required.

3. Subpart DDDDD—National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters

Source: 69 FR 55253, Sept. 13, 2004, unless otherwise noted.

What This Subpart Covers

Section 63.7480 What is the purpose of this subpart?

This subpart establishes national emission limits and work practice standards for hazardous air pollutants (HAP) emitted from industrial, commercial, and institutional boilers and process heaters. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limits and work practice standards.

Section 63.7485 Am I subject to this subpart?

You are subject to this subpart if you own or operate an industrial, commercial, or institutional boiler or process heater as defined in Section 63.7575 that is located at, or is part of, a major source of HAP as defined in Section 63.2 or Section 63.761 (40 CFR part 63, subpart HH, National Emission Standards for Hazardous Air Pollutants from Oil and Natural Gas Production Facilities), except as specified in Section 63.7491.

Section 63.7490 What is the affected source of this subpart?

(a) This subpart applies to new, reconstructed, or existing affected sources as described in paragraphs (a)(1) and (2) of this section.

(1) The affected source of this subpart is the collection of all existing industrial, commercial, and institutional boilers and process heaters within a subcategory located at a major source as defined in Section 63.7575.

(2) The affected source of this subpart is each new or reconstructed industrial, commercial, or institutional boiler or process heater located at a major source as defined in Section 63.7575.

(b) A boiler or process heater is new if you commence construction of the boiler or process heater after January 13, 2003, and you meet the applicability criteria at the time you commence construction.

(c) A boiler or process heater is reconstructed if you meet the reconstruction criteria as defined in Section 63.2, you commence reconstruction after January 13, 2003, and you meet the applicability criteria at the time you commence reconstruction.

(d) A boiler or process heater is existing if it is not new or reconstructed.

Section 63.7491 Are any boilers or process heaters not subject to this subpart?

The types of boilers and process heaters listed in paragraphs (a) through (o) of this section are not subject to this subpart.

(a) A municipal waste combustor covered by 40 CFR part 60, subpart AAAA, subpart BBBB, subpart Cb or subpart Eb.

(b) A hospital/medical/infectious waste incinerator covered by 40 CFR part 60, subpart Ce or subpart Ec.

(c) An electric utility steam generating unit that is a fossil fuel-fired combustion unit of more than 25 megawatts that serves a generator that produces electricity for sale. A fossil fuel-fired unit that cogenerates steam and electricity, and supplies more than one-third of its potential electric output capacity, and more than 25 megawatts electrical output to any utility power distribution system for sale is considered an electric utility steam generating unit.

(d) A boiler or process heater required to have a permit under section 3005 of the Solid Waste Disposal Act or covered by 40 CFR part 63, subpart EEE (e.g., hazardous waste boilers).

(e) A commercial and industrial solid waste incineration unit covered by 40 CFR part 60, subpart CCCC or subpart DDDD.

(f) A recovery boiler or furnace covered by 40 CFR part 63, subpart MM.

(g) A boiler or process heater that is used specifically for research and development. This does not include units that only provide heat or steam to a process at a research and development facility.

(h) A hot water heater as defined in this subpart.

(i) A refining kettle covered by 40 CFR part 63, subpart X.

(j) An ethylene cracking furnace covered by 40 CFR part 63, subpart YY.

(k) Blast furnace stoves as described in the EPA document, entitled "National Emission Standards for Hazardous Air Pollutants (NESHAP) for Integrated Iron and Steel Plants—Background Information for Proposed Standards," (EPA-453/R-01-005).

(l) Any boiler and process heater specifically listed as an affected source in another standard(s) under 40 CFR part 63.

(m) Any boiler and process heater specifically listed as an affected source in another standard(s) established under section 129 of the Clean Air Act (CAA).

(n) Temporary boilers as defined in this subpart.

(o) Blast furnace gas fuel-fired boilers and process heaters as defined in this subpart.

Section 63.7495 When do I have to comply with this subpart?

(a) If you have a new or reconstructed boiler or process heater, you must comply with this subpart by November 12, 2004 or upon startup of your boiler or process heater, whichever is later.

(b) If you have an existing boiler or process heater, you must comply with this subpart no later than September 13, 2007.

(c) If you have an area source that increases its emissions or its potential to emit such that it becomes a major source of HAP, paragraphs (c)(1) and (2) of this section apply to you.

(1) Any new or reconstructed boiler or process heater at the existing facility must be in compliance with this subpart upon startup.

(2) Any existing boiler or process heater at the existing facility must be in compliance with this subpart within 3 years after the facility becomes a major source.

(d) You must meet the notification requirements in Section 63.7545 according to the schedule in Section 63.7545 and in subpart A of this part. Some of the notifications must be submitted before you are required to comply with the emission limits and work practice standards in this subpart.

Emission Limits and Work Practice Standards

Section 63.7499 What are the subcategories of boilers and process heaters?

The subcategories of boilers and process heaters are large solid fuel, limited use solid fuel, small solid fuel, large liquid fuel, limited use liquid fuel, small liquid fuel, large gaseous fuel, limited use gaseous fuel, and small gaseous fuel. Each subcategory is defined in Section 63.7575.

Section 63.7500 What emission limits, work practice standards, and operating limits must I meet?

(a) You must meet the requirements in paragraphs (a)(1) and (2) of this section.

(1) You must meet each emission limit and work practice standard in Table 1 to this subpart that applies to your boiler or process heater, except as provided under Section 63.7507.

(2) You must meet each operating limit in Tables 2 through 4 to this subpart that applies to your boiler or process heater. If you use a control device or combination of control devices not covered in Tables 2 through 4 to this subpart, or you wish to establish and monitor an alternative operating limit and alternative monitoring parameters, you must apply to the United States Environmental Protection Agency (EPA) Administrator for approval of alternative monitoring under Section 63.8(f).

(b) As provided in Section 63.6(g), EPA may approve use of an alternative to the work practice standards in this section.

General Compliance Requirements

Section 63.7505 What are my general requirements for complying with this subpart?

(a) You must be in compliance with the emission limits (including operating limits) and the work practice standards in this subpart at all times, except during periods of startup, shutdown, and malfunction.

(b) You must always operate and maintain your affected source, including air pollution control and monitoring equipment, according to the provisions in Section 63.6(e)(1)(i).

(c) You can demonstrate compliance with any applicable emission limit using fuel analysis if the emission rate calculated according to Section 63.7530(d) is less than the applicable emission limit. Otherwise, you must demonstrate compliance using performance testing.

(d) If you demonstrate compliance with any applicable emission limit through performance testing, you must develop a site-specific monitoring plan according to the requirements in paragraphs (d)(1) through (4) of this section. This requirement also applies to you if you petition the EPA Administrator for alternative monitoring

parameters under Section 63.8(f).

(1) For each continuous monitoring system (CMS) required in this section, you must develop and submit to the EPA Administrator for approval a site-specific monitoring plan that addresses paragraphs (d)(1)(i) through (iii) of this section. You must submit this site-specific monitoring plan at least 60 days before your initial performance evaluation of your CMS.

(i) Installation of the CMS sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (e.g., on or downstream of the last control device);

(ii) Performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction systems; and

(iii) Performance evaluation procedures and acceptance criteria (e.g., calibrations).

(2) In your site-specific monitoring plan, you must also address paragraphs (d)(2)(i) through (iii) of this section.

(i) Ongoing operation and maintenance procedures in accordance with the general requirements of Section 63.8(c)(1), (c)(3), and (c)(4)(ii);

(ii) Ongoing data quality assurance procedures in accordance with the general requirements of Section 63.8(d); and

(iii) Ongoing recordkeeping and reporting procedures in accordance with the general requirements of Section 63.10(c), (e)(1), and (e)(2)(i).

(3) You must conduct a performance evaluation of each CMS in accordance with your site-specific monitoring plan.

(4) You must operate and maintain the CMS in continuous operation according to the site-specific monitoring plan.

(e) If you have an applicable emission limit or work practice standard, you must develop and implement a written startup, shutdown, and malfunction plan (SSMP) according to the provisions in Section 63.6(e)(3).

Section 63.7506 Do any boilers or process heaters have limited requirements?

(a) New or reconstructed boilers and process heaters in the large liquid fuel subcategory or the limited use liquid fuel subcategory that burn only fossil fuels and other gases and do not burn any residual oil are subject to the emission limits and applicable work practice standards in Table 1 to this subpart. You are not required to conduct a performance test to demonstrate compliance with the emission limits. You are not required to set and maintain operating limits to

demonstrate continuous compliance with the emission limits. However, you must meet the requirements in paragraphs (a)(1) and (2) of this section and meet the CO work practice standard in Table 1 to this subpart.

(1) To demonstrate initial compliance, you must include a signed statement in the Notification of Compliance Status report required in Section 63.7545(e) that indicates you burn only liquid fossil fuels other than residual oils, either alone or in combination with gaseous fuels.

(2) To demonstrate continuous compliance with the applicable emission limits, you must also keep records that demonstrate that you burn only liquid fossil fuels other than residual oils, either alone or in combination with gaseous fuels. You must also include a signed statement in each semiannual compliance report required in Section 63.7550 that indicates you burned only liquid fossil fuels other than residual oils, either alone or in combination with gaseous fuels, during the reporting period.

(b) The affected boilers and process heaters listed in paragraphs (b)(1) through (3) of this section are subject to only the initial notification requirements in Section 63.9(b) (*i.e.*, they are not subject to the emission limits, work practice standards, performance testing, monitoring, SSMP, site-specific monitoring plans, recordkeeping and reporting requirements of this subpart or any other requirements in subpart A of this part).

(1) Existing large and limited use gaseous fuel units.

(2) Existing large and limited use liquid fuel units.

(3) New or reconstructed small liquid fuel units that burn only gaseous fuels or distillate oil. New or reconstructed small liquid fuel boilers and process heaters that commence burning of any other type of liquid fuel must comply with all applicable requirements of this subpart and subpart A of this part upon startup of burning the other type of liquid fuel.

(c) The affected boilers and process heaters listed in paragraphs (c)(1) through (4) of this section are not subject to the initial notification requirements in Section 63.9(b) and are not subject to any requirements in this subpart or in subpart A of this part (*i.e.*, they are not subject to the emission limits, work practice standards, performance testing, monitoring, SSM plans, site-specific monitoring plans, recordkeeping and reporting requirements of this subpart, or any other requirements in subpart A of this part).

(1) Existing small solid fuel boilers and process heaters.

(2) Existing small liquid fuel boilers and process heaters.

(3) Existing small gaseous fuel boilers and process heaters.

(4) New or reconstructed small gaseous fuel units.

Section 63.7507 What are the health-based compliance alternatives for the hydrogen chloride (HCl) and total selected metals (TSM) standards?

(a) As an alternative to the requirement for large solid fuel boilers located at a single facility to demonstrate compliance with the HCl emission limit in Table 1 to this subpart, you may demonstrate eligibility for the health-based compliance alternative for HCl emissions under the procedures prescribed in appendix A to this subpart.

(b) In lieu of complying with the TSM emission standards in Table 1 to this subpart based on the sum of emissions for the eight selected metals, you may demonstrate eligibility for complying with the TSM emission standards in Table 1 based on the sum of emissions for seven selected metals (by excluding manganese emissions from the summation of TSM emissions) under the procedures prescribed in appendix A to this subpart.

Testing, Fuel Analyses, and Initial Compliance Requirements

Section 63.7510 What are my initial compliance requirements and by what date must I conduct them?

(a) For affected sources that elect to demonstrate compliance with any of the emission limits of this subpart through performance testing, your initial compliance requirements include conducting performance tests according to Section 63.7520 and Table 5 to this subpart, conducting a fuel analysis for each type of fuel burned in your boiler or process heater according to Section 63.7521 and Table 6 to this subpart, establishing operating limits according to Section 63.7530 and Table 7 to this subpart, and conducting CMS performance evaluations according to Section 63.7525.

(b) For affected sources that elect to demonstrate compliance with the emission limits for HCl, mercury, or TSM through fuel analysis, your initial compliance requirement is to conduct a fuel analysis for each type of fuel burned in your boiler or process heater according to Section 63.7521 and Table 6 to this subpart and establish operating limits according to Section 63.7530 and Table 8 to this subpart.

(c) For affected sources that have an applicable work practice standard, your initial compliance requirements depend on the subcategory and rated capacity of your boiler or process heater. If your boiler or process heater is in any of the limited use subcategories or has a heat input capacity less than 100 MMBTU per hour, your initial compliance demonstration is conducting a performance test for carbon monoxide according to Table 5 to this subpart. If your boiler or process heater is in any of the large subcategories and has a heat input capacity of 100 MMBTU per hour or greater, your initial compliance demonstration is conducting a performance evaluation of your continuous emission monitoring system for carbon monoxide according to Section 63.7525(a).

(d) For existing affected sources, you must demonstrate initial compliance no later

than 180 days after the compliance date that is specified for your source in Section 63.7495 and according to the applicable provisions in Section 63.7(a)(2) as cited in Table 10 to this subpart.

(e) If your new or reconstructed affected source commenced construction or reconstruction between January 13, 2003 and November 12, 2004, you must demonstrate initial compliance with either the proposed emission limits and work practice standards or the promulgated emission limits and work practice standards no later than 180 days after November 12, 2004 or within 180 days after startup of the source, whichever is later, according to Section 63.7(a)(2)(ix).

(f) If your new or reconstructed affected source commenced construction or reconstruction between January 13, 2003, and November 12, 2004, and you chose to comply with the proposed emission limits and work practice standards when demonstrating initial compliance, you must conduct a second compliance demonstration for the promulgated emission limits and work practice standards within 3 years after November 12, 2004 or within 3 years after startup of the affected source, whichever is later.

(g) If your new or reconstructed affected source commences construction or reconstruction after November 12, 2004, you must demonstrate initial compliance with the promulgated emission limits and work practice standards no later than 180 days after startup of the source.

Section 63.7515 When must I conduct subsequent performance tests or fuel analyses?

(a) You must conduct all applicable performance tests according to Section 63.7520 on an annual basis, unless you follow the requirements listed in paragraphs (b) through (d) of this section. Annual performance tests must be completed between 10 and 12 months after the previous performance test, unless you follow the requirements listed in paragraphs (b) through (d) of this section.

(b) You can conduct performance tests less often for a given pollutant if your performance tests for the pollutant (particulate matter, HCl, mercury, or TSM) for at least 3 consecutive years show that you comply with the emission limit. In this case, you do not have to conduct a performance test for that pollutant for the next 2 years. You must conduct a performance test during the third year and no more than 36 months after the previous performance test.

(c) If your boiler or process heater continues to meet the emission limit for particulate matter, HCl, mercury, or TSM, you may choose to conduct performance tests for these pollutants every third year, but each such performance test must be conducted no more than 36 months after the previous performance test.

(d) If a performance test shows noncompliance with an emission limit for particulate matter, HCl, mercury, or TSM, you must conduct annual performance tests for that pollutant until all performance tests over a consecutive 3-year period show compliance.

(e) If you have an applicable work practice standard for carbon monoxide and your boiler or process heater is in any of the limited use subcategories or has a heat input capacity less than 100 MMBTU per hour, you must conduct annual performance tests for carbon monoxide according to Section 63.7520. Each annual performance test must be conducted between 10 and 12 months after the previous performance test.

(f) You must conduct a fuel analysis according to Section 63.7521 for each type of fuel burned no later than 5 years after the previous fuel analysis for each fuel type. If you burn a new type of fuel, you must conduct a fuel analysis before burning the new type of fuel in your boiler or process heater. You must still meet all applicable continuous compliance requirements in Section 63.7540.

(g) You must report the results of performance tests and fuel analyses within 60 days after the completion of the performance tests or fuel analyses. This report should also verify that the operating limits for your affected source have not changed or provide documentation of revised operating parameters established according to Section 63.7530 and Table 7 to this subpart, as applicable. The reports for all subsequent performance tests and fuel analyses should include all applicable information required in Section 63.7550.

Section 63.7520 What performance tests and procedures must I use?

(a) You must conduct all performance tests according to Section 63.7(c), (d), (f), and (h). You must also develop a site-specific test plan according to the requirements in Section 63.7(c) if you elect to demonstrate compliance through performance testing.

(b) You must conduct each performance test according to the requirements in Table 5 to this subpart.

(c) New or reconstructed boilers or process heaters in one of the liquid fuel subcategories that burn only fossil fuels and other gases and do not burn any residual oil must demonstrate compliance according to Section 63.7506(a).

(d) You must conduct each performance test under the specific conditions listed in Tables 5 and 7 to this subpart. You must conduct performance tests at the maximum normal operating load while burning the type of fuel or mixture of fuels that have the highest content of chlorine, mercury, and total selected metals, and you must demonstrate initial compliance and establish your operating limits based on these tests. These requirements could result in the need to conduct more than one performance test.

(e) You may not conduct performance tests during periods of startup, shutdown, or malfunction.

(f) You must conduct three separate test runs for each performance test required in this section, as specified in Section 63.7(e)(3). Each test run must last at least 1 hour.

(g) To determine compliance with the emission limits, you must use the F-Factor methodology and equations in sections 12.2 and 12.3 of EPA Method 19 of appendix A to part 60 of this chapter to convert the measured particulate matter concentrations, the measured HCl concentrations, the measured TSM concentrations, and the measured mercury concentrations that result from the initial performance test to pounds per million Btu heat input emission rates using F-factors.

Section 63.7521 What fuel analyses and procedures must I use?

(a) You must conduct fuel analyses according to the procedures in paragraphs (b) through (e) of this section and Table 6 to this subpart, as applicable.

(b) You must develop and submit a site-specific fuel analysis plan to the EPA Administrator for review and approval according to the following procedures and requirements in paragraphs (b)(1) and (2) of this section.

(1) You must submit the fuel analysis plan no later than 60 days before the date that you intend to demonstrate compliance.

(2) You must include the information contained in paragraphs (b)(2)(i) through (vi) of this section in your fuel analysis plan.

(i) The identification of all fuel types anticipated to be burned in each boiler or process heater.

(ii) For each fuel type, the notification of whether you or a fuel supplier will be conducting the fuel analysis.

(iii) For each fuel type, a detailed description of the sample location and specific procedures to be used for collecting and preparing the composite samples if your procedures are different from paragraph (c) or (d) of this section. Samples should be collected at a location that most accurately represents the fuel type, where possible, at a point prior to mixing with other dissimilar fuel types.

(iv) For each fuel type, the analytical methods, with the expected minimum detection levels, to be used for the measurement of selected total metals, chlorine, or mercury.

(v) If you request to use an alternative analytical method other than those required by Table 6 to this subpart, you must also include a detailed description of the methods and procedures that will be used.

(vi) If you will be using fuel analysis from a fuel supplier in lieu of site-specific sampling and analysis, the fuel supplier must use the analytical methods required by Table 6 to this subpart.

(c) At a minimum, you must obtain three composite fuel samples for each fuel type according to the procedures in paragraph (c)(1) or (2) of this section.

(1) If sampling from a belt (or screw) feeder, collect fuel samples according to paragraphs (c)(1)(i) and (ii) of this section.

(i) Stop the belt and withdraw a 6-inch wide sample from the full cross-section of the stopped belt to obtain a minimum two pounds of sample. Collect all the material (fines and coarse) in the full cross-section. Transfer the sample to a clean plastic bag.

(ii) Each composite sample will consist of a minimum of three samples collected at approximately equal intervals during the testing period.

(2) If sampling from a fuel pile or truck, collect fuel samples according to paragraphs (c)(2)(i) through (iii) of this section.

(i) For each composite sample, select a minimum of five sampling locations uniformly spaced over the surface of the pile.

(ii) At each sampling site, dig into the pile to a depth of 18 inches. Insert a clean flat square shovel into the hole and withdraw a sample, making sure that large pieces do not fall off during sampling.

(iii) Transfer all samples to a clean plastic bag for further processing.

(d) Prepare each composite sample according to the procedures in paragraphs (d)(1) through (7) of this section.

(1) Thoroughly mix and pour the entire composite sample over a clean plastic sheet.

(2) Break sample pieces larger than 3 inches into smaller sizes.

(3) Make a pie shape with the entire composite sample and subdivide it into four equal parts.

(4) Separate one of the quarter samples as the first subset.

(5) If this subset is too large for grinding, repeat the procedure in paragraph (d)(3) of this section with the quarter sample and obtain a one-quarter subset from this sample.

(6) Grind the sample in a mill.

(7) Use the procedure in paragraph (d)(3) of this section to obtain a one-quarter subsample for analysis. If the quarter sample is too large, subdivide it further using the same procedure.

(e) Determine the concentration of pollutants in the fuel (mercury, chlorine, and/or total selected metals) in units of pounds per million Btu of each composite sample for each fuel type according to the procedures in Table 6 to this subpart.

Section 63.7522 Can I use emission averaging to comply with this subpart?

(a) As an alternative to meeting the requirements of Section 63.7500, if you have more than one existing large solid fuel boiler located at your facility, you may demonstrate compliance by emission averaging according to the procedures in this section in a State that does not choose to exclude emission averaging.

(b) For each existing large solid fuel boiler in the averaging group, the emission rate achieved during the initial compliance test for the HAP being averaged must not exceed the emission level that was being achieved on November 12, 2004 or the control technology employed during the initial compliance test must not be less effective for the HAP being averaged than the control technology employed on November 12, 2004.

(c) You may average particulate matter or TSM, HCl, and mercury emissions from existing large solid fuel boilers to demonstrate compliance with the limits in Table 1 to this subpart if you satisfy the requirements in paragraphs (d), (e), and (f) of this section.

(d) The weighted average emissions from the existing large solid fuel boilers participating in the emissions averaging option must be in compliance with the limits in Table 1 to this subpart at all times following the compliance date specified in Section 63.7495.

(e) You must demonstrate initial compliance according to paragraphs (e)(1) or (2) of this section.

(1) You must use Equation 1 of this section to demonstrate that the particulate matter or TSM, HCl, and mercury emissions from all existing large solid fuel boilers participating in the emissions averaging option do not exceed the emission limits in Table 1 to this subpart.

Where:

AveWeighted = Average weighted emissions for particulate matter or TSM, HCl, or mercury, in units of pounds per million Btu of heat input.

E_r = Emission rate (as calculated according to Table 5 to this subpart) or fuel analysis (as calculated by the applicable equation in Section 63.7530(d)) for boiler, i , for particulate matter or TSM, HCl, or mercury, in units of pounds per million Btu of heat input.

H_{m_i} = Maximum rated heat input capacity of boiler, i , in units of million Btu per hour.

n = Number of large solid fuel boilers participating in the emissions averaging option.

(2) If you are not capable of monitoring heat input, you can use Equation 2 of this section as an alternative to using equation 1 of this section to demonstrate that the particulate matter or TSM, HCl, and mercury emissions from all existing large solid

fuel boilers participating in the emissions averaging option do not exceed the emission limits in Table 1 to this subpart.

Where:

AveWeighted = Average weighted emission level for PM or TSM, HCl, or mercury, in units of pounds per million Btu of heat input.

Er = Emission rate (as calculated according to Table 5 to this subpart) or fuel analysis (as calculated by the applicable equation in Section 63.7530(d)) for boiler, i, for particulate matter or TSM, HCl, or mercury, in units of pounds per million Btu of heat input.

Sm = Maximum steam generation by boiler, i, in units of pounds.

Cf = Conversion factor, calculated from the most recent compliance test, in units of million Btu of heat input per pounds of steam generated.

(f) You must demonstrate continuous compliance on a 12-month rolling average basis determined at the end of every month (12 times per year) according to paragraphs (f)(1) and (2). The first 12-month rolling-average period begins on the compliance date specified in Section 63.7495.

(1) For each calendar month, you must use Equation 3 of this section to calculate the 12-month rolling average weighted emission limit using the actual heat capacity for each existing large solid fuel boiler participating in the emissions averaging option.

Where:

AveWeighted Emissions = 12-month rolling average weighted emission level for particulate matter or TSM, HCl, or mercury, in units of pounds per million Btu of heat input.

Er = Emission rate, calculated during the most recent compliance test, (as calculated according to Table 5 to this subpart) or fuel analysis (as calculated by the applicable equation in Section 63.7530(d)) for boiler, i, for particulate matter or TSM, HCl, or mercury, in units of pounds per million Btu of heat input.

Hb = The average heat input for each calendar month of boiler, i, in units of million Btu.

n = Number of large solid fuel boilers participating in the emissions averaging option.

(2) If you are not capable of monitoring heat input, you can use Equation 4 of this section as an alternative to using Equation 3 of this section to calculate the 12-

month rolling average weighted emission limit using the actual steam generation from the large solid fuel boilers participating in the emissions averaging option.

Where:

Average Weighted Emissions = 12-month rolling average weighted emission level for PM or TSM, HCl, or mercury, in units of pounds per million Btu of heat input.

E_r = Emission rate, calculated during the most recent compliance test (as calculated according to Table 5 to this subpart) or fuel analysis (as calculated by the applicable equation in Section 63.7530(d)) for boiler, i , for particulate matter or TSM, HCl, or mercury, in units of pounds per million Btu of heat input.

S_a = Actual steam generation for each calendar month by boiler, i , in units of pounds.

C_f = Conversion factor, as calculated during the most recent compliance test, in units of million Btu of heat input per pounds of steam generated.

(g) You must develop and submit an implementation plan for emission averaging to the applicable regulatory authority for review and approval according to the following procedures and requirements in paragraphs (g)(1) through (4).

(1) You must submit the implementation plan no later than 180 days before the date that the facility intends to demonstrate compliance using the emission averaging option.

(2) You must include the information contained in paragraphs (g)(2)(i) through (vii) of this section in your implementation plan for all emission sources included in an emissions average:

(i) The identification of all existing large solid fuel boilers in the averaging group, including for each either the applicable HAP emission level or the control technology installed on;

(ii) The process parameter (heat input or steam generated) that will be monitored for each averaging group of large solid fuel boilers;

(iii) The specific control technology or pollution prevention measure to be used for each emission source in the averaging group and the date of its installation or application. If the pollution prevention measure reduces or eliminates emissions from multiple sources, the owner or operator must identify each source;

(iv) The test plan for the measurement of particulate matter (or TSM), HCl, or mercury emissions in accordance with the requirements in Section 63.7520;

(v) The operating parameters to be monitored for each control system or device and a description of how the operating limits will be determined;

(vi) If you request to monitor an alternative operating parameter pursuant to Section 63.7525, you must also include:

(A) A description of the parameter(s) to be monitored and an explanation of the criteria used to select the parameter(s); and

(B) A description of the methods and procedures that will be used to demonstrate that the parameter indicates proper operation of the control device; the frequency and content of monitoring, reporting, and recordkeeping requirements; and a demonstration, to the satisfaction of the applicable regulatory authority, that the proposed monitoring frequency is sufficient to represent control device operating conditions; and

(vii) A demonstration that compliance with each of the applicable emission limit(s) will be achieved under representative operating conditions.

(3) Upon receipt, the regulatory authority shall review and approve or disapprove the plan according to the following criteria:

(i) Whether the content of the plan includes all of the information specified in paragraph (g)(2) of this section; and

(ii) Whether the plan presents sufficient information to determine that compliance will be achieved and maintained.

(4) The applicable regulatory authority shall not approve an emission averaging implementation plan containing any of the following provisions:

(i) Any averaging between emissions of differing pollutants or between differing sources; or

(ii) The inclusion of any emission source other than an existing large solid fuel boiler.

Section 63.7525 What are my monitoring, installation, operation, and maintenance requirements?

(a) If you have an applicable work practice standard for carbon monoxide, and your boiler or process heater is in any of the large subcategories and has a heat input capacity of 100 MMBTU per hour or greater, you must install, operate, and maintain a continuous emission monitoring system (CEMS) for carbon monoxide according to the procedures in paragraphs (a)(1) through (6) of this section by the compliance date specified in Section 63.7495.

(1) Each CEMS must be installed, operated, and maintained according to Performance Specification (PS) 4A of 40 CFR part 60, appendix B, and according to the site-specific monitoring plan developed according to Section 63.7505(d).

(2) You must conduct a performance evaluation of each CEMS according to the requirements in Section 63.8 and according to PS 4A of 40 CFR part 60, appendix B.

(3) Each CEMS must complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period.

(4) The CEMS data must be reduced as specified in Section 63.8(g)(2).

(5) You must calculate and record a 30-day rolling average emission rate on a daily basis. A new 30-day rolling average emission rate is calculated as the average of all of the hourly CO emission data for the preceding 30 operating days.

(6) For purposes of calculating data averages, you must not use data recorded during periods of monitoring malfunctions, associated repairs, out-of-control periods, required quality assurance or control activities, or when your boiler or process heater is operating at less than 50 percent of its rated capacity. You must use all the data collected during all other periods in assessing compliance. Any period for which the monitoring system is out of control and data are not available for required calculations constitutes a deviation from the monitoring requirements.

(b) If you have an applicable opacity operating limit, you must install, operate, certify and maintain each continuous opacity monitoring system (COMS) according to the procedures in paragraphs (b)(1) through (7) of this section by the compliance date specified in Section 63.7495.

(1) Each COMS must be installed, operated, and maintained according to PS 1 of 40 CFR part 60, appendix B.

(2) You must conduct a performance evaluation of each COMS according to the requirements in Section 63.8 and according to PS 1 of 40 CFR part 60, appendix B.

(3) As specified in Section 63.8(c)(4)(i), each COMS must complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period.

(4) The COMS data must be reduced as specified in Section 63.8(g)(2).

(5) You must include in your site-specific monitoring plan procedures and acceptance criteria for operating and maintaining each COMS according to the requirements in Section 63.8(d). At a minimum, the monitoring plan must include a daily calibration drift assessment, a quarterly performance audit, and an annual zero alignment audit of each COMS.

(6) You must operate and maintain each COMS according to the requirements in the monitoring plan and the requirements of Section 63.8(e). Identify periods the COMS is out of control including any periods that the COMS fails to pass a daily calibration drift assessment, a quarterly performance audit, or an annual zero

alignment audit.

(7) You must determine and record all the 6-minute averages (and 1-hour block averages as applicable) collected for periods during which the COMS is not out of control.

(c) If you have an operating limit that requires the use of a CMS, you must install, operate, and maintain each continuous parameter monitoring system (CPMS) according to the procedures in paragraphs (c)(1) through (5) of this section by the compliance date specified in Section 63.7495.

(1) The CPMS must complete a minimum of one cycle of operation for each successive 15-minute period. You must have a minimum of four successive cycles of operation to have a valid hour of data.

(2) Except for monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), you must conduct all monitoring in continuous operation at all times that the unit is operating. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

(3) For purposes of calculating data averages, you must not use data recorded during monitoring malfunctions, associated repairs, out of control periods, or required quality assurance or control activities. You must use all the data collected during all other periods in assessing compliance. Any period for which the monitoring system is out-of-control and data are not available for required calculations constitutes a deviation from the monitoring requirements.

(4) Determine the 3-hour block average of all recorded readings, except as provided in paragraph (c)(3) of this section.

(5) Record the results of each inspection, calibration, and validation check.

(d) If you have an operating limit that requires the use of a flow measurement device, you must meet the requirements in paragraphs (c) and (d)(1) through (4) of this section.

(1) Locate the flow sensor and other necessary equipment in a position that provides a representative flow.

(2) Use a flow sensor with a measurement sensitivity of 2 percent of the flow rate.

(3) Reduce swirling flow or abnormal velocity distributions due to upstream and downstream disturbances.

(4) Conduct a flow sensor calibration check at least semiannually.

(e) If you have an operating limit that requires the use of a pressure measurement

device, you must meet the requirements in paragraphs (c) and (e)(1) through (6) of this section.

(1) Locate the pressure sensor(s) in a position that provides a representative measurement of the pressure.

(2) Minimize or eliminate pulsating pressure, vibration, and internal and external corrosion.

(3) Use a gauge with a minimum tolerance of 1.27 centimeters of water or a transducer with a minimum tolerance of 1 percent of the pressure range.

(4) Check pressure tap pluggage daily.

(5) Using a manometer, check gauge calibration quarterly and transducer calibration monthly.

(6) Conduct calibration checks any time the sensor exceeds the manufacturer's specified maximum operating pressure range or install a new pressure sensor.

(f) If you have an operating limit that requires the use of a pH measurement device, you must meet the requirements in paragraphs (c) and (f)(1) through (3) of this section.

(1) Locate the pH sensor in a position that provides a representative measurement of scrubber effluent pH.

(2) Ensure the sample is properly mixed and representative of the fluid to be measured.

(3) Check the pH meter's calibration on at least two points every 8 hours of process operation.

(g) If you have an operating limit that requires the use of equipment to monitor voltage and secondary current (or total power input) of an electrostatic precipitator (ESP), you must use voltage and secondary current monitoring equipment to measure voltage and secondary current to the ESP.

(h) If you have an operating limit that requires the use of equipment to monitor sorbent injection rate (e.g., weigh belt, weigh hopper, or hopper flow measurement device), you must meet the requirements in paragraphs (c) and (h)(1) through (3) of this section.

(1) Locate the device in a position(s) that provides a representative measurement of the total sorbent injection rate.

(2) Install and calibrate the device in accordance with manufacturer's procedures and specifications.

(3) At least annually, calibrate the device in accordance with the manufacturer's procedures and specifications.

(i) If you elect to use a fabric filter bag leak detection system to comply with the requirements of this subpart, you must install, calibrate, maintain, and continuously operate a bag leak detection system as specified in paragraphs (i)(1) through (8) of this section.

(1) You must install and operate a bag leak detection system for each exhaust stack of the fabric filter.

(2) Each bag leak detection system must be installed, operated, calibrated, and maintained in a manner consistent with the manufacturer's written specifications and recommendations and in accordance with the guidance provided in EPA-454/R-98-015, September 1997.

(3) The bag leak detection system must be certified by the manufacturer to be capable of detecting particulate matter emissions at concentrations of 10 milligrams per actual cubic meter or less.

(4) The bag leak detection system sensor must provide output of relative or absolute particulate matter loadings.

(5) The bag leak detection system must be equipped with a device to continuously record the output signal from the sensor.

(6) The bag leak detection system must be equipped with an alarm system that will sound automatically when an increase in relative particulate matter emissions over a preset level is detected. The alarm must be located where it is easily heard by plant operating personnel.

(7) For positive pressure fabric filter systems that do not duct all compartments of cells to a common stack, a bag leak detection system must be installed in each baghouse compartment or cell.

(8) Where multiple bag leak detectors are required, the system's instrumentation and alarm may be shared among detectors.

Section 63.7530 How do I demonstrate initial compliance with the emission limits and work practice standards?

(a) You must demonstrate initial compliance with each emission limit and work practice standard that applies to you by either conducting initial performance tests and establishing operating limits, as applicable, according to Section 63.7520, paragraph (c) of this section, and Tables 5 and 7 to this subpart OR conducting initial fuel analyses to determine emission rates and establishing operating limits, as applicable, according to Section 63.7521, paragraph (d) of this section, and Tables 6 and 8 to this subpart.

(b) New or reconstructed boilers or process heaters in one of the liquid fuel subcategories that burn only fossil fuels and other gases and do not burn any residual oil must demonstrate compliance according to Section 63.7506(a).

(c) If you demonstrate compliance through performance testing, you must establish each site-specific operating limit in Tables 2 through 4 to this subpart that applies to you according to the requirements in Section 63.7520, Table 7 to this subpart, and paragraph (c)(4) of this section, as applicable. You must also conduct fuel analyses according to Section 63.7521 and establish maximum fuel pollutant input levels according to paragraphs (c)(1) through (3) of this section, as applicable.

(1) You must establish the maximum chlorine fuel input (C_{input}) during the initial performance testing according to the procedures in paragraphs (c)(1)(i) through (iii) of this section.

(i) You must determine the fuel type or fuel mixture that you could burn in your boiler or process heater that has the highest content of chlorine.

(ii) During the performance testing for HCl, you must determine the fraction of the total heat input for each fuel type burned (Q_i) based on the fuel mixture that has the highest content of chlorine, and the average chlorine concentration of each fuel type burned (C_i).

(iii) You must establish a maximum chlorine input level using Equation 5 of this section.

Where:

C_{input} = Maximum amount of chlorine entering the boiler or process heater through fuels burned in units of pounds per million Btu.

C_i = Arithmetic average concentration of chlorine in fuel type, i , analyzed according to Section 63.7521, in units of pounds per million Btu.

Q_i = Fraction of total heat input from fuel type, i , based on the fuel mixture that has the highest content of chlorine. If you do not burn multiple fuel types during the performance testing, it is not necessary to determine the value of this term. Insert a value of "1" for Q_i .

n = Number of different fuel types burned in your boiler or process heater for the mixture that has the highest content of chlorine.

(2) If you choose to comply with the alternative TSM emission limit instead of the particulate matter emission limit, you must establish the maximum TSM fuel input level (TSM_{input}) during the initial performance testing according to the procedures in paragraphs (c)(2)(i) through (iii) of this section.

(i) You must determine the fuel type or fuel mixture that you could burn in your boiler or process heater that has the highest content of TSM.

(ii) During the performance testing for TSM, you must determine the fraction of

total heat input from each fuel burned (Q_i) based on the fuel mixture that has the highest content of total selected metals, and the average TSM concentration of each fuel type burned (M_i).

(iii) You must establish a baseline TSM input level using Equation 6 of this section.

Where:

TSM_{input} = Maximum amount of TSM entering the boiler or process heater through fuels burned in units of pounds per million Btu.

M_i = Arithmetic average concentration of TSM in fuel type, i , analyzed according to Section 63.7521, in units of pounds per million Btu.

Q_i = Fraction of total heat input from based fuel type, i , based on the fuel mixture that has the highest content of TSM. If you do not burn multiple fuel types during the performance test, it is not necessary to determine the value of this term. Insert a value of "1" for Q_i .

n = Number of different fuel types burned in your boiler or process heater for the mixture that has the highest content of TSM.

(3) You must establish the maximum mercury fuel input level ($Mercury_{input}$) during the initial performance testing using the procedures in paragraphs (c)(3)(i) through (iii) of this section.

(i) You must determine the fuel type or fuel mixture that you could burn in your boiler or process heater that has the highest content of mercury.

(ii) During the compliance demonstration for mercury, you must determine the fraction of total heat input for each fuel burned (Q_i) based on the fuel mixture that has the highest content of mercury, and the average mercury concentration of each fuel type burned (HG_i).

(iii) You must establish a maximum mercury input level using Equation 7 of this section.

Where:

$Mercury_{input}$ = Maximum amount of mercury entering the boiler or process heater through fuels burned in units of pounds per million Btu.

HG_i = Arithmetic average concentration of mercury in fuel type, i , analyzed according to Section 63.7521, in units of pounds per million Btu.

Q_i = Fraction of total heat input from fuel type, i , based on the fuel mixture that has

the highest mercury content. If you do not burn multiple fuel types during the performance test, it is not necessary to determine the value of this term. Insert a value of "1" for Q_i .

n = Number of different fuel types burned in your boiler or process heater for the mixture that has the highest content of mercury.

(4) You must establish parameter operating limits according to paragraphs (c)(4)(i) through (iv) of this section.

(i) For a wet scrubber, you must establish the minimum scrubber effluent pH, liquid flowrate, and pressure drop as defined in Section 63.7575, as your operating limits during the three-run performance test. If you use a wet scrubber and you conduct separate performance tests for particulate matter, HCl, and mercury emissions, you must establish one set of minimum scrubber effluent pH, liquid flowrate, and pressure drop operating limits. The minimum scrubber effluent pH operating limit must be established during the HCl performance test. If you conduct multiple performance tests, you must set the minimum liquid flowrate and pressure drop operating limits at the highest minimum values established during the performance tests.

(ii) For an electrostatic precipitator, you must establish the minimum voltage and secondary current (or total power input), as defined in Section 63.7575, as your operating limits during the three-run performance test.

(iii) For a dry scrubber, you must establish the minimum sorbent injection rate, as defined in Section 63.7575, as your operating limit during the three-run performance test.

(iv) The operating limit for boilers or process heaters with fabric filters that choose to demonstrate continuous compliance through bag leak detection systems is that a bag leak detection system be installed according to the requirements in Section 63.7525, and that each fabric filter must be operated such that the bag leak detection system alarm does not sound more than 5 percent of the operating time during a 6-month period.

(d) If you elect to demonstrate compliance with an applicable emission limit through fuel analysis, you must conduct fuel analyses according to Section 63.7521 and follow the procedures in paragraphs (d)(1) through (5) of this section.

(1) If you burn more than one fuel type, you must determine the fuel mixture you could burn in your boiler or process heater that would result in the maximum emission rates of the pollutants that you elect to demonstrate compliance through fuel analysis.

(2) You must determine the 90th percentile confidence level fuel pollutant concentration of the composite samples analyzed for each fuel type using the one-sided z-statistic test described in Equation 8 of this section.

Where:

P_{90} = 90th percentile confidence level pollutant concentration, in pounds per million Btu.

mean = Arithmetic average of the fuel pollutant concentration in the fuel samples analyzed according to Section 63.7521, in units of pounds per million Btu.

SD = Standard deviation of the pollutant concentration in the fuel samples analyzed according to Section 63.7521, in units of pounds per million Btu.

t = t distribution critical value for 90th percentile (0.1) probability for the appropriate degrees of freedom (number of samples minus one) as obtained from a Distribution Critical Value Table.

(3) To demonstrate compliance with the applicable emission limit for HCl, the HCl emission rate that you calculate for your boiler or process heater using Equation 9 of this section must be less than the applicable emission limit for HCl.

Where:

HCl = HCl emission rate from the boiler or process heater in units of pounds per million Btu.

C_{i90} = 90th percentile confidence level concentration of chlorine in fuel type, i, in units of pounds per million Btu as calculated according to Equation 8 of this section.

Q_i = Fraction of total heat input from fuel type, i, based on the fuel mixture that has the highest content of chlorine. If you do not burn multiple fuel types, it is not necessary to determine the value of this term. Insert a value of "1" for Q_i .

n = Number of different fuel types burned in your boiler or process heater for the mixture that has the highest content of chlorine.

1.028 = Molecular weight ratio of HCl to chlorine.

(4) To demonstrate compliance with the applicable emission limit for TSM, the TSM emission rate that you calculate for your boiler or process heater using Equation 10 of this section must be less than the applicable emission limit for TSM.

Where:

TSM = TSM emission rate from the boiler or process heater in units of pounds per

million Btu.

M_{i90} = 90th percentile confidence level concentration of TSM in fuel, i , in units of pounds per million Btu as calculated according to Equation 8 of this section.

Q_i = Fraction of total heat input from fuel type, i , based on the fuel mixture that has the highest content of total selected metals. If you do not burn multiple fuel types, it is not necessary to determine the value of this term. Insert a value of "1" for Q_i .

n = Number of different fuel types burned in your boiler or process heater for the mixture that has the highest content of TSM.

(5) To demonstrate compliance with the applicable emission limit for mercury, the mercury emission rate that you calculate for your boiler or process heater using Equation 11 of this section must be less than the applicable emission limit for mercury.

Where:

Mercury = Mercury emission rate from the boiler or process heater in units of pounds per million Btu.

HG_{i90} = 90th percentile confidence level concentration of mercury in fuel, i , in units of pounds per million Btu as calculated according to Equation 8 of this section.

Q_i = Fraction of total heat input from fuel type, i , based on the fuel mixture that has the highest mercury content. If you do not burn multiple fuel types, it is not necessary to determine the value of this term. Insert a value of "1" for Q_i .

n = Number of different fuel types burned in your boiler or process heater for the mixture that has the highest mercury content.

(e) You must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in Section 63.7545(e).

Continuous Compliance Requirements

Section 63.7535 How do I monitor and collect data to demonstrate continuous compliance?

(a) You must monitor and collect data according to this section and the site-specific monitoring plan required by Section 63.7505(d).

(b) Except for monitor malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), you must monitor continuously (or collect data at all required intervals) at all times that the affected source is operating.

(c) You may not use data recorded during monitoring malfunctions, associated repairs, or required quality assurance or control activities in data averages and calculations used to report emission or operating levels. You must use all the data collected during all other periods in assessing the operation of the control device and associated control system. Boilers and process heaters that have an applicable carbon monoxide work practice standard and are required to install and operate a CEMS, may not use data recorded during periods when the boiler or process heater is operating at less than 50 percent of its rated capacity.

Section 63.7540 How do I demonstrate continuous compliance with the emission limits and work practice standards?

(a) You must demonstrate continuous compliance with each emission limit, operating limit, and work practice standard in Tables 1 through 4 to this subpart that applies to you according to the methods specified in Table 8 to this subpart and paragraphs (a)(1) through (10) of this section.

(1) Following the date on which the initial performance test is completed or is required to be completed under Section 63.7 and 63.7510, whichever date comes first, you must not operate above any of the applicable maximum operating limits or below any of the applicable minimum operating limits listed in Tables 2 through 4 to this subpart at all times except during periods of startup, shutdown and malfunction. Operating limits do not apply during performance tests. Operation above the established maximum or below the established minimum operating limits shall constitute a deviation of established operating limits.

(2) You must keep records of the type and amount of all fuels burned in each boiler or process heater during the reporting period to demonstrate that all fuel types and mixtures of fuels burned would either result in lower emissions of TSM, HCl, and mercury, than the applicable emission limit for each pollutant (if you demonstrate compliance through fuel analysis), or result in lower fuel input of TSM, chlorine, and mercury than the maximum values calculated during the last performance tests (if you demonstrate compliance through performance testing).

(3) If you demonstrate compliance with an applicable HCl emission limit through fuel analysis and you plan to burn a new type of fuel, you must recalculate the HCl emission rate using Equation 9 of Section 63.7530 according to paragraphs (a)(3)(i) through (iii) of this section.

(i) You must determine the chlorine concentration for any new fuel type in units of pounds per million Btu, based on supplier data or your own fuel analysis, according to the provisions in your site-specific fuel analysis plan developed according to Section 63.7521(b).

(ii) You must determine the new mixture of fuels that will have the highest content of chlorine.

(iii) Recalculate the HCl emission rate from your boiler or process heater under

these new conditions using Equation 9 of Section 63.7530. The recalculated HCl emission rate must be less than the applicable emission limit.

(4) If you demonstrate compliance with an applicable HCl emission limit through performance testing and you plan to burn a new type of fuel type or a new mixture of fuels, you must recalculate the maximum chlorine input using Equation 5 of Section 63.7530. If the results of recalculating the maximum chlorine input using Equation 5 of Section 63.7530 are higher than the maximum chlorine input level established during the previous performance test, then you must conduct a new performance test within 60 days of burning the new fuel type or fuel mixture according to the procedures in Section 63.7520 to demonstrate that the HCl emissions do not exceed the emission limit. You must also establish new operating limits based on this performance test according to the procedures in Section 63.7530(c).

(5) If you demonstrate compliance with an applicable TSM emission limit through fuel analysis, and you plan to burn a new type of fuel, you must recalculate the TSM emission rate using Equation 10 of Section 63.7530 according to the procedures specified in paragraphs (a)(5)(i) through (iii) of this section.

(i) You must determine the TSM concentration for any new fuel type in units of pounds per million Btu, based on supplier data or your own fuel analysis, according to the provisions in your site-specific fuel analysis plan developed according to Section 63.7521(b).

(ii) You must determine the new mixture of fuels that will have the highest content of TSM.

(iii) Recalculate the TSM emission rate from your boiler or process heater under these new conditions using Equation 10 of Section 63.7530. The recalculated TSM emission rate must be less than the applicable emission limit.

(6) If you demonstrate compliance with an applicable TSM emission limit through performance testing, and you plan to burn a new type of fuel or a new mixture of fuels, you must recalculate the maximum TSM input using Equation 6 of Section 63.7530. If the results of recalculating the maximum total selected metals input using Equation 6 of Section 63.7530 are higher than the maximum TSM input level established during the previous performance test, then you must conduct a new performance test within 60 days of burning the new fuel type or fuel mixture according to the procedures in Section 63.7520 to demonstrate that the TSM emissions do not exceed the emission limit. You must also establish new operating limits based on this performance test according to the procedures in Section 63.7530(c).

(7) If you demonstrate compliance with an applicable mercury emission limit through fuel analysis, and you plan to burn a new type of fuel, you must recalculate the mercury emission rate using Equation 11 of Section 63.7530 according to the procedures specified in paragraphs (a)(7)(i) through (iii) of this

section.

(i) You must determine the mercury concentration for any new fuel type in units of pounds per million Btu, based on supplier data or your own fuel analysis, according to the provisions in your site-specific fuel analysis plan developed according to Section 63.7521(b).

(ii) You must determine the new mixture of fuels that will have the highest content of mercury.

(iii) Recalculate the mercury emission rate from your boiler or process heater under these new conditions using Equation 11 of Section 63.7530. The recalculated mercury emission rate must be less than the applicable emission limit.

(8) If you demonstrate compliance with an applicable mercury emission limit through performance testing, and you plan to burn a new type of fuel or a new mixture of fuels, you must recalculate the maximum mercury input using Equation 7 of Section 63.7530. If the results of recalculating the maximum mercury input using Equation 7 of Section 63.7530 are higher than the maximum mercury input level established during the previous performance test, then you must conduct a new performance test within 60 days of burning the new fuel type or fuel mixture according to the procedures in Section 63.7520 to demonstrate that the mercury emissions do not exceed the emission limit. You must also establish new operating limits based on this performance test according to the procedures in Section 63.7530(c).

(9) If your unit is controlled with a fabric filter, and you demonstrate continuous compliance using a bag leak detection system, you must initiate corrective action within 1 hour of a bag leak detection system alarm and complete corrective actions according to your SSMP, and operate and maintain the fabric filter system such that the alarm does not sound more than 5 percent of the operating time during a 6-month period. You must also keep records of the date, time, and duration of each alarm, the time corrective action was initiated and completed, and a brief description of the cause of the alarm and the corrective action taken. You must also record the percent of the operating time during each 6-month period that the alarm sounds. In calculating this operating time percentage, if inspection of the fabric filter demonstrates that no corrective action is required, no alarm time is counted. If corrective action is required, each alarm shall be counted as a minimum of 1 hour. If you take longer than 1 hour to initiate corrective action, the alarm time shall be counted as the actual amount of time taken to initiate corrective action.

(10) If you have an applicable work practice standard for carbon monoxide, and you are required to install a CEMS according to Section 63.7525(a), then you must meet the requirements in paragraphs (a)(10)(i) through (iii) of this section.

(i) You must continuously monitor carbon monoxide according to Section

63.7525(a) and 63.7535.

(ii) Maintain a carbon monoxide emission level below your applicable carbon monoxide work practice standard in Table 1 to this subpart at all times except during periods of startup, shutdown, malfunction, and when your boiler or process heater is operating at less than 50 percent of rated capacity.

(iii) Keep records of carbon monoxide levels according to Section 63.7555(b).

(b) You must report each instance in which you did not meet each emission limit, operating limit, and work practice standard in Tables 1 through 4 to this subpart that apply to you. You must also report each instance during a startup, shutdown, or malfunction when you did not meet each applicable emission limit, operating limit, and work practice standard. These instances are deviations from the emission limits and work practice standards in this subpart. These deviations must be reported according to the requirements in Section 63.7550.

(c) During periods of startup, shutdown, and malfunction, you must operate in accordance with the SSMP as required in Section 63.7505(e).

(d) Consistent with Section 63.6(e) and 63.7(e)(1), deviations that occur during a period of startup, shutdown, or malfunction are not violations if you demonstrate to the EPA Administrator's satisfaction that you were operating in accordance with your SSMP. The EPA Administrator will determine whether deviations that occur during a period of startup, shutdown, or malfunction are violations, according to the provisions in Section 63.6(e).

Section 63.7541 How do I demonstrate continuous compliance under the emission averaging provision?

(a) Following the compliance date, the owner or operator must demonstrate compliance with this subpart on a continuous basis by meeting the requirements of paragraphs (a)(1) through (4) of this section.

(1) For each calendar month, demonstrate compliance with the average weighted emissions limit for the existing large solid fuel boilers participating in the emissions averaging option as determined in Section 63.7522(f) and (g);

(2) For each existing solid fuel boiler participating in the emissions averaging option that is equipped with a dry control system, maintain opacity at or below the applicable limit;

(3) For each existing solid fuel boiler participating in the emissions averaging option that is equipped with a wet scrubber, maintain the 3-hour average parameter values at or below the operating limits established during the most recent performance test; and

(4) For each existing solid fuel boiler participating in the emissions averaging option that has an approved alternative operating plan, maintain the 3-hour average parameter values at or below the operating limits established in the most

recent performance test.

(b) Any instance where the owner or operator fails to comply with the continuous monitoring requirements in paragraphs (a)(1) through (4) of this section, except during periods of startup, shutdown, and malfunction, is a deviation.

Notification, Reports, and Records

Section 63.7545 What notifications must I submit and when?

(a) You must submit all of the notifications in Section 63.7(b) and (c), 63.8 (e), (f)(4) and (6), and 63.9 (b) through (h) that apply to you by the dates specified.

(b) As specified in Section 63.9(b)(2), if you startup your affected source before November 12, 2004, you must submit an Initial Notification not later than 120 days after November 12, 2004. The Initial Notification must include the information required in paragraphs (b)(1) and (2) of this section, as applicable.

(1) If your affected source has an annual capacity factor of greater than 10 percent, your Initial Notification must include the information required by Section 63.9(b)(2).

(2) If your affected source has a federally enforceable permit that limits the annual capacity factor to less than or equal to 10 percent such that the unit is in one of the limited use subcategories (the limited use solid fuel subcategory, the limited use liquid fuel subcategory, or the limited use gaseous fuel subcategory), your Initial Notification must include the information required by Section 63.9(b)(2) and also a signed statement indicating your affected source has a federally enforceable permit that limits the annual capacity factor to less than or equal to 10 percent.

(c) As specified in Section 63.9(b)(4) and (b)(5), if you startup your new or reconstructed affected source on or after November 12, 2004, you must submit an Initial Notification not later than 15 days after the actual date of startup of the affected source.

(d) If you are required to conduct a performance test you must submit a Notification of Intent to conduct a performance test at least 30 days before the performance test is scheduled to begin.

(e) If you are required to conduct an initial compliance demonstration as specified in Section 63.7530(a), you must submit a Notification of Compliance Status according to Section 63.9(h)(2)(ii). For each initial compliance demonstration, you must submit the Notification of Compliance Status, including all performance test results and fuel analyses, before the close of business on the 60th day following the completion of the performance test and/or other initial compliance demonstrations according to Section 63.10(d)(2). The Notification of Compliance Status report must contain all the information specified in paragraphs (e)(1) through (9), as applicable.

(1) A description of the affected source(s) including identification of which

subcategory the source is in, the capacity of the source, a description of the add-on controls used on the source description of the fuel(s) burned, and justification for the fuel(s) burned during the performance test.

(2) Summary of the results of all performance tests, fuel analyses, and calculations conducted to demonstrate initial compliance including all established operating limits.

(3) Identification of whether you are complying with the particulate matter emission limit or the alternative total selected metals emission limit.

(4) Identification of whether you plan to demonstrate compliance with each applicable emission limit through performance testing or fuel analysis.

(5) Identification of whether you plan to demonstrate compliance by emissions averaging.

(6) A signed certification that you have met all applicable emission limits and work practice standards.

(7) A summary of the carbon monoxide emissions monitoring data and the maximum carbon monoxide emission levels recorded during the performance test to show that you have met any applicable work practice standard in Table 1 to this subpart.

(8) If your new or reconstructed boiler or process heater is in one of the liquid fuel subcategories and burns only liquid fossil fuels other than residual oil either alone or in combination with gaseous fuels, you must submit a signed statement certifying this in your Notification of Compliance Status report.

(9) If you had a deviation from any emission limit or work practice standard, you must also submit a description of the deviation, the duration of the deviation, and the corrective action taken in the Notification of Compliance Status report.

Section 63.7550 What reports must I submit and when?

(a) You must submit each report in Table 9 to this subpart that applies to you.

(b) Unless the EPA Administrator has approved a different schedule for submission of reports under Section 63.10(a), you must submit each report by the date in Table 9 to this subpart and according to the requirements in paragraphs (b)(1) through (5) of this section.

(1) The first compliance report must cover the period beginning on the compliance date that is specified for your affected source in Section 63.7495 and ending on June 30 or December 31, whichever date is the first date that occurs at least 180 days after the compliance date that is specified for your source in Section 63.7495.

(2) The first compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the first

calendar half after the compliance date that is specified for your source in Section 63.7495.

(3) Each subsequent compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.

(4) Each subsequent compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.

(5) For each affected source that is subject to permitting regulations pursuant to 40 CFR part 70 or 40 CFR part 71, and if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), you may submit the first and subsequent compliance reports according to the dates the permitting authority has established instead of according to the dates in paragraphs (b)(1) through (4) of this section.

(c) The compliance report must contain the information required in paragraphs (c)(1) through (11) of this section.

(1) Company name and address.

(2) Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.

(3) Date of report and beginning and ending dates of the reporting period.

(4) The total fuel use by each affected source subject to an emission limit, for each calendar month within the semiannual reporting period, including, but not limited to, a description of the fuel and the total fuel usage amount with units of measure.

(5) A summary of the results of the annual performance tests and documentation of any operating limits that were reestablished during this test, if applicable.

(6) A signed statement indicating that you burned no new types of fuel. Or, if you did burn a new type of fuel, you must submit the calculation of chlorine input, using Equation 5 of Section 63.7530, that demonstrates that your source is still within its maximum chlorine input level established during the previous performance testing (for sources that demonstrate compliance through performance testing) or you must submit the calculation of HCl emission rate using Equation 9 of Section 63.7530 that demonstrates that your source is still meeting the emission limit for HCl emissions (for boilers or process heaters that demonstrate compliance through fuel analysis). If you burned a new type of fuel, you must submit the calculation of TSM input, using Equation 6 of Section 63.7530, that demonstrates that your source is still within its maximum TSM input level established during the previous performance testing (for sources that demonstrate compliance through performance testing), or you must submit the calculation of TSM emission rate using Equation 10 of Section 63.7530 that demonstrates that your source is still

meeting the emission limit for TSM emissions (for boilers or process heaters that demonstrate compliance through fuel analysis). If you burned a new type of fuel, you must submit the calculation of mercury input, using Equation 7 of Section 63.7530, that demonstrates that your source is still within its maximum mercury input level established during the previous performance testing (for sources that demonstrate compliance through performance testing), or you must submit the calculation of mercury emission rate using Equation 11 of Section 63.7530 that demonstrates that your source is still meeting the emission limit for mercury emissions (for boilers or process heaters that demonstrate compliance through fuel analysis).

(7) If you wish to burn a new type of fuel and you can not demonstrate compliance with the maximum chlorine input operating limit using Equation 5 of Section 63.7530, the maximum TSM input operating limit using Equation 6 of Section 63.7530, or the maximum mercury input operating limit using Equation 7 of Section 63.7530, you must include in the compliance report a statement indicating the intent to conduct a new performance test within 60 days of starting to burn the new fuel.

(8) The hours of operation for each boiler and process heater that is subject to an emission limit for each calendar month within the semiannual reporting period. This requirement applies only to limited use boilers and process heaters.

(9) If you had a startup, shutdown, or malfunction during the reporting period and you took actions consistent with your SSMP, the compliance report must include the information in Section 63.10(d)(5)(i).

(10) If there are no deviations from any emission limits or operating limits in this subpart that apply to you, and there are no deviations from the requirements for work practice standards in this subpart, a statement that there were no deviations from the emission limits, operating limits, or work practice standards during the reporting period.

(11) If there were no periods during which the CMSs, including CEMS, COMS, and CPMS, were out of control as specified in Section 63.8(c)(7), a statement that there were no periods during which the CMSs were out of control during the reporting period.

(d) For each deviation from an emission limit or operating limit in this subpart and for each deviation from the requirements for work practice standards in this subpart that occurs at an affected source where you are not using a CMSs to comply with that emission limit, operating limit, or work practice standard, the compliance report must contain the information in paragraphs (c)(1) through (10) of this section and the information required in paragraphs (d)(1) through (4) of this section. This includes periods of startup, shutdown, and malfunction.

(1) The total operating time of each affected source during the reporting period.

(2) A description of the deviation and which emission limit, operating limit, or work

practice standard from which you deviated.

(3) Information on the number, duration, and cause of deviations (including unknown cause), as applicable, and the corrective action taken.

(4) A copy of the test report if the annual performance test showed a deviation from the emission limit for particulate matter or the alternative TSM limit, a deviation from the HCl emission limit, or a deviation from the mercury emission limit.

(e) For each deviation from an emission limitation and operating limit or work practice standard in this subpart occurring at an affected source where you are using a CMS to comply with that emission limit, operating limit, or work practice standard, you must include the information in paragraphs (c) (1) through (10) of this section and the information required in paragraphs (e) (1) through (12) of this section. This includes periods of startup, shutdown, and malfunction and any deviations from your site-specific monitoring plan as required in Section 63.7505(d).

(1) The date and time that each malfunction started and stopped and description of the nature of the deviation (*i.e.*, what you deviated from).

(2) The date and time that each CMS was inoperative, except for zero (low-level) and high-level checks.

(3) The date, time, and duration that each CMS was out of control, including the information in Section 63.8(c)(8).

(4) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of startup, shutdown, or malfunction or during another period.

(5) A summary of the total duration of the deviation during the reporting period and the total duration as a percent of the total source operating time during that reporting period.

(6) A breakdown of the total duration of the deviations during the reporting period into those that are due to startup, shutdown, control equipment problems, process problems, other known causes, and other unknown causes.

(7) A summary of the total duration of CMSs downtime during the reporting period and the total duration of CMS downtime as a percent of the total source operating time during that reporting period.

(8) An identification of each parameter that was monitored at the affected source for which there was a deviation, including opacity, carbon monoxide, and operating parameters for wet scrubbers and other control devices.

(9) A brief description of the source for which there was a deviation.

(10) A brief description of each CMS for which there was a deviation.

(11) The date of the latest CMS certification or audit for the system for which there was a deviation.

(12) A description of any changes in CMSs, processes, or controls since the last reporting period for the source for which there was a deviation.

(f) Each affected source that has obtained a title V operating permit pursuant to 40 CFR part 70 or 40 CFR part 71 must report all deviations as defined in this subpart in the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If an affected source submits a compliance report pursuant to Table 9 to this subpart along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the compliance report includes all required information concerning deviations from any emission limit, operating limit, or work practice requirement in this subpart, submission of the compliance report satisfies any obligation to report the same deviations in the semiannual monitoring report. However, submission of a compliance report does not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the permit authority.

(g) If you operate a new gaseous fuel unit that is subject to the work practice standard specified in Table 1 to this subpart, and you intend to use a fuel other than natural gas or equivalent to fire the affected unit, you must submit a notification of alternative fuel use within 48 hours of the declaration of a period of natural gas curtailment or supply interruption, as defined in Section 63.7575. The notification must include the information specified in paragraphs (g)(1) through (5) of this section.

(1) Company name and address.

(2) Identification of the affected unit.

(3) Reason you are unable to use natural gas or equivalent fuel, including the date when the natural gas curtailment was declared or the natural gas supply interruption began.

(4) Type of alternative fuel that you intend to use.

(5) Dates when the alternative fuel use is expected to begin and end.

Section 63.7555 What records must I keep?

(a) You must keep records according to paragraphs (a)(1) through (3) of this section.

(1) A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status or semiannual compliance report that you submitted, according to the requirements in Section 63.10(b)(2)(xiv).

(2) The records in Section 63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction.

(3) Records of performance tests, fuel analyses, or other compliance demonstrations, performance evaluations, and opacity observations as required in Section 63.10(b)(2)(viii).

(b) For each CEMS, CPMS, and COMS, you must keep records according to paragraphs (b)(1) through (5) of this section.

(1) Records described in Section 63.10(b)(2) (vi) through (xi).

(2) Monitoring data for continuous opacity monitoring system during a performance evaluation as required in Section 63.6(h)(7)(i) and (ii).

(3) Previous (*i.e.*, superseded) versions of the performance evaluation plan as required in Section 63.8(d)(3).

(4) Request for alternatives to relative accuracy test for CEMS as required in Section 63.8(f)(6)(i).

(5) Records of the date and time that each deviation started and stopped, and whether the deviation occurred during a period of startup, shutdown, or malfunction or during another period.

(c) You must keep the records required in Table 8 to this subpart including records of all monitoring data and calculated averages for applicable operating limits such as opacity, pressure drop, carbon monoxide, and pH to show continuous compliance with each emission limit, operating limit, and work practice standard that applies to you.

(d) For each boiler or process heater subject to an emission limit, you must also keep the records in paragraphs (d)(1) through (5) of this section.

(1) You must keep records of monthly fuel use by each boiler or process heater, including the type(s) of fuel and amount(s) used.

(2) You must keep records of monthly hours of operation by each boiler or process heater. This requirement applies only to limited-use boilers and process heaters.

(3) A copy of all calculations and supporting documentation of maximum chlorine fuel input, using Equation 5 of Section 63.7530, that were done to demonstrate continuous compliance with the HCl emission limit, for sources that demonstrate compliance through performance testing. For sources that demonstrate compliance through fuel analysis, a copy of all calculations and supporting documentation of HCl emission rates, using Equation 9 of Section 63.7530, that were done to demonstrate compliance with the HCl emission limit. Supporting documentation should include results of any fuel analyses and basis for the estimates of maximum chlorine fuel input or HCl emission rates. You can use the results from one fuel analysis for multiple boilers and process heaters provided

they are all burning the same fuel type. However, you must calculate chlorine fuel input, or HCl emission rate, for each boiler and process heater.

(4) A copy of all calculations and supporting documentation of maximum TSM fuel input, using Equation 6 of Section 63.7530, that were done to demonstrate continuous compliance with the TSM emission limit for sources that demonstrate compliance through performance testing. For sources that demonstrate compliance through fuel analysis, a copy of all calculations and supporting documentation of TSM emission rates, using Equation 10 of Section 63.7530, that were done to demonstrate compliance with the TSM emission limit. Supporting documentation should include results of any fuel analyses and basis for the estimates of maximum TSM fuel input or TSM emission rates. You can use the results from one fuel analysis for multiple boilers and process heaters provided they are all burning the same fuel type. However, you must calculate TSM fuel input, or TSM emission rates, for each boiler and process heater.

(5) A copy of all calculations and supporting documentation of maximum mercury fuel input, using Equation 7 of Section 63.7530, that were done to demonstrate continuous compliance with the mercury emission limit for sources that demonstrate compliance through performance testing. For sources that demonstrate compliance through fuel analysis, a copy of all calculations and supporting documentation of mercury emission rates, using Equation 11 of Section 63.7530, that were done to demonstrate compliance with the mercury emission limit. Supporting documentation should include results of any fuel analyses and basis for the estimates of maximum mercury fuel input or mercury emission rates. You can use the results from one fuel analysis for multiple boilers and process heaters provided they are all burning the same fuel type. However, you must calculate mercury fuel input, or mercury emission rates, for each boiler and process heater.

(e) If your boiler or process heater is subject to an emission limit or work practice standard in Table 1 to this subpart and has a federally enforceable permit that limits the annual capacity factor to less than or equal to 10 percent such that the unit is in one of the limited use subcategories, you must keep the records in paragraphs (e)(1) and (2) of this section.

(1) A copy of the federally enforceable permit that limits the annual capacity factor of the source to less than or equal to 10 percent.

(2) Fuel use records for the days the boiler or process heater was operating.

Section 63.7560 In what form and how long must I keep my records?

(a) Your records must be in a form suitable and readily available for expeditious review, according to Section 63.10(b)(1).

(b) As specified in Section 63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

(c) You must keep each record on site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to Section 63.10(b)(1). You can keep the records off site for the remaining 3 years.

Other Requirements and Information

Section 63.7565 What parts of the General Provisions apply to me?

Table 10 to this subpart shows which parts of the General Provisions in Section 63.1 through 63.15 apply to you.

Section 63.7570 Who implements and enforces this subpart?

(a) This subpart can be implemented and enforced by U.S. EPA, or a delegated authority such as your State, local, or tribal agency. If the EPA Administrator has delegated authority to your State, local, or tribal agency, then that agency (as well as the U.S. EPA) has the authority to implement and enforce this subpart. You should contact your EPA Regional Office to find out if this subpart is delegated to your State, local, or tribal agency.

(b) In delegating implementation and enforcement authority of this subpart to a State, local, or tribal agency under 40 CFR part 63, subpart E, the authorities listed in paragraphs (b)(1) through (5) of this section are retained by the EPA Administrator and are not transferred to the State, local, or tribal agency, however, the U.S. EPA retains oversight of this subpart and can take enforcement actions, as appropriate.

(1) Approval of alternatives to the non-opacity emission limits and work practice standards in Section 63.7500(a) and (b) under Section 63.6(g).

(2) Approval of alternative opacity emission limits in Section 63.7500(a) under Section 63.6(h)(9).

(3) Approval of major change to test methods in Table 5 to this subpart under Section 63.7(e)(2)(ii) and (f) and as defined in Section 63.90.

(4) Approval of major change to monitoring under Section 63.8(f) and as defined in Section 63.90.

(5) Approval of major change to recordkeeping and reporting under Section 63.10(f) and as defined in Section 63.90.

Section 63.7575 What definitions apply to this subpart?

Terms used in this subpart are defined in the CAA, in Section 63.2 (the General Provisions), and in this section as follows:

Annual capacity factor means the ratio between the actual heat input to a boiler or process heater from the fuels burned during a calendar year, and the potential

heat input to the boiler or process heater had it been operated for 8,760 hours during a year at the maximum steady state design heat input capacity.

Bag leak detection system means an instrument that is capable of monitoring particulate matter loadings in the exhaust of a fabric filter (*i.e.*, baghouse) in order to detect bag failures. A bag leak detection system includes, but is not limited to, an instrument that operates on electrodynamic, triboelectric, light scattering, light transmittance, or other principle to monitor relative particulate matter loadings.

Biomass fuel means unadulterated wood as defined in this subpart, wood residue, and wood products (*e.g.*, trees, tree stumps, tree limbs, bark, lumber, sawdust, sanderdust, chips, scraps, slabs, millings, and shavings); animal litter; vegetative agricultural and silvicultural materials, such as logging residues (slash), nut and grain hulls and chaff (*e.g.*, almond, walnut, peanut, rice, and wheat), bagasse, orchard prunings, corn stalks, coffee bean hulls and grounds.

Blast furnace gas fuel-fired boiler or process heater means an industrial/commercial/institutional boiler or process heater that receives 90 percent or more of its total heat input (based on an annual average) from blast furnace gas.

Boiler means an enclosed device using controlled flame combustion and having the primary purpose of recovering thermal energy in the form of steam or hot water. Waste heat boilers are excluded from this definition.

Coal means all solid fuels classifiable as anthracite, bituminous, sub-bituminous, or lignite by the American Society for Testing and Materials in ASTM D388–991.¹, “Standard Specification for Classification of Coals by Rank¹” (incorporated by reference, see Section 63.14(b)), coal refuse, and petroleum coke. Synthetic fuels derived from coal for the purpose of creating useful heat including but not limited to, solvent-refined coal, coal-oil mixtures, and coal-water mixtures, for the purposes of this subpart. Coal derived gases are excluded from this definition.

Coal refuse means any by-product of coal mining or coal cleaning operations with an ash content greater than 50 percent (by weight) and a heating value less than 13,900 kilojoules per kilogram (6,000 Btu per pound) on a dry basis.

Commercial/institutional boiler means a boiler used in commercial establishments or institutional establishments such as medical centers, research centers, institutions of higher education, hotels, and laundries to provide electricity, steam, and/or hot water.

Construction/demolition material means waste building material that result from the construction or demolition operations on houses and commercial and industrial buildings.

Deviation. (1) Deviation means any instance in which an affected source subject to this subpart, or an owner or operator of such a source:

(i) Fails to meet any requirement or obligation established by this subpart including, but not limited to, any emission limit, operating limit, or work practice standard;

(ii) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any affected source required to obtain such a permit; or

(iii) Fails to meet any emission limit, operating limit, or work practice standard in this subpart during startup, shutdown, or malfunction, regardless of whether or not such failure is permitted by this subpart.

(2) A deviation is not always a violation. The determination of whether a deviation constitutes a violation of the standard is up to the discretion of the entity responsible for enforcement of the standards.

Distillate oil means fuel oils, including recycled oils, that comply with the specifications for fuel oil numbers 1 and 2, as defined by the American Society for Testing and Materials in ASTM D396-02a, "Standard Specifications for Fuel Oils¹" (incorporated by reference, see Section 63.14(b)).

Dry scrubber means an add-on air pollution control system that injects dry alkaline sorbent (dry injection) or sprays an alkaline sorbent (spray dryer) to react with and neutralize acid gas in the exhaust stream forming a dry powder material. Sorbent injection systems in fluidized bed boilers and process heaters are included in this definition.

Electric utility steam generating unit means a fossil fuel-fired combustion unit of more than 25 megawatts that serves a generator that produces electricity for sale. A fossil fuel-fired unit that cogenerates steam and electricity and supplies more than one-third of its potential electric output capacity and more than 25 megawatts electrical output to any utility power distribution system for sale is considered an electric utility steam generating unit.

Electrostatic precipitator means an add-on air pollution control device used to capture particulate matter by charging the particles using an electrostatic field, collecting the particles using a grounded collecting surface, and transporting the particles into a hopper.

Fabric filter means an add-on air pollution control device used to capture particulate matter by filtering gas streams through filter media, also known as a baghouse.

Federally enforceable means all limitations and conditions that are enforceable by the EPA Administrator, including the requirements of 40 CFR parts 60 and 61, requirements within any applicable State implementation plan, and any permit requirements established under 40 CFR 52.21 or under 40 CFR 51.18 and 40 CFR 51.24.

Firetube boiler means a boiler in which hot gases of combustion pass through the tubes and water contacts the outside surfaces of the tubes.

Fossil fuel means natural gas, petroleum, coal, and any form of solid, liquid, or gaseous fuel derived from such materials.

Fuel type means each category of fuels that share a common name or classification. Examples include, but are not limited to, bituminous coal, sub bituminous coal, lignite, anthracite, biomass, construction/demolition material, salt water laden wood, creosote treated wood, tires, residual oil. Individual fuel types received from different suppliers are not considered new fuel types except for construction/demolition material.

Gaseous fuel includes, but is not limited to, natural gas, process gas, landfill gas, coal derived gas, refinery gas, and biogas. Blast furnace gas is exempted from this definition.

Heat input means heat derived from combustion of fuel in a boiler or process heater and does not include the heat input from preheated combustion air, recirculated flue gases, or exhaust gases from other sources such as gas turbines, internal combustion engines, kilns, etc.

Hot water heater means a closed vessel with a capacity of no more than 120 U.S. gallons in which water is heated by combustion of gaseous or liquid fuel and is withdrawn for use external to the vessel at pressures not exceeding 160 psig, including the apparatus by which the heat is generated and all controls and devices necessary to prevent water temperatures from exceeding 210 °F (99 °C).

Industrial boiler means a boiler used in manufacturing, processing, mining, and refining or any other industry to provide steam, hot water, and/or electricity.

Large gaseous fuel subcategory includes any watertube boiler or process heater that burns gaseous fuels not combined with any solid fuels, burns liquid fuel only during periods of gas curtailment or gas supply emergencies, has a rated capacity of greater than 10 MMBTU per hour heat input, and has an annual capacity factor of greater than 10 percent.

Large liquid fuel subcategory includes any watertube boiler or process heater that does not burn any solid fuel and burns any liquid fuel either alone or in combination with gaseous fuels, has a rated capacity of greater than 10 MMBTU per hour heat input, and has an annual capacity factor of greater than 10 percent. Large gaseous fuel boilers and process heaters that burn liquid fuel during periods of gas curtailment or gas supply emergencies are not included in this definition.

Large solid fuel subcategory includes any watertube boiler or process heater that burns any amount of solid fuel either alone or in combination with liquid or gaseous fuels, has a rated capacity of greater than 10 MMBTU per hour heat input, and has an annual capacity factor of greater than 10 percent.

Limited use gaseous fuel subcategory includes any watertube boiler or process heater that burns gaseous fuels not combined with any liquid or solid fuels, burns liquid fuel only during periods of gas curtailment or gas supply emergencies, has a rated capacity of greater than 10 MMBTU per hour heat input, and has a federally enforceable annual average capacity factor of equal to or less than 10 percent.

Limited use liquid fuel subcategory includes any watertube boiler or process heater that does not burn any solid fuel and burns any liquid fuel either alone or in combination with gaseous fuels, has a rated capacity of greater than 10 MMBTU per hour heat input, and has a federally enforceable annual average capacity factor of equal to or less than 10 percent. Limited use gaseous fuel boilers and process heaters that burn liquid fuel during periods of gas curtailment or gas supply emergencies are not included in this definition.

Limited use solid fuel subcategory includes any watertube boiler or process heater that burns any amount of solid fuel either alone or in combination with liquid or gaseous fuels, has a rated capacity of greater than 10 MMBTU per hour heat input, and has a federally enforceable annual average capacity factor of equal to or less than 10 percent.

Liquid fossil fuel means petroleum, distillate oil, residual oil and any form of liquid fuel derived from such material.

Liquid fuel includes, but is not limited to, distillate oil, residual oil, waste oil, and process liquids.

Minimum pressure drop means 90 percent of the lowest test-run average pressure drop measured according to Table 7 to this subpart during the most recent performance test demonstrating compliance with the applicable emission limit.

Minimum scrubber effluent pH means 90 percent of the lowest test-run average effluent pH measured at the outlet of the wet scrubber according to Table 7 to this subpart during the most recent performance test demonstrating compliance with the applicable hydrogen chloride emission limit.

Minimum scrubber flow rate means 90 percent of the lowest test-run average flow rate measured according to Table 7 to this subpart during the most recent performance test demonstrating compliance with the applicable emission limit.

Minimum sorbent flow rate means 90 percent of the lowest test-run average sorbent (or activated carbon) flow rate measured according to Table 7 to this subpart during the most recent performance test demonstrating compliance with the applicable emission limits.

Minimum voltage or amperage means 90 percent of the lowest test-run average voltage or amperage to the electrostatic precipitator measured according to Table 7 to this subpart during the most recent performance test demonstrating compliance with the applicable emission limits.

Natural gas means:

(1) A naturally occurring mixture of hydrocarbon and nonhydrocarbon gases found in geologic formations beneath the earth's surface, of which the principal constituent is methane; or

(2) Liquid petroleum gas, as defined by the American Society for Testing and Materials in ASTM D1835–03a, “Standard Specification for Liquid Petroleum Gases” (incorporated by reference, see Section 63.14(b)).

Opacity means the degree to which emissions reduce the transmission of light and obscure the view of an object in the background.

Particulate matter means any finely divided solid or liquid material, other than uncombined water, as measured by the test methods specified under this subpart, or an alternative method.

Period of natural gas curtailment or supply interruption means a period of time during which the supply of natural gas to an affected facility is halted for reasons beyond the control of the facility. An increase in the cost or unit price of natural gas does not constitute a period of natural gas curtailment or supply interruption.

Process heater means an enclosed device using controlled flame, that is not a boiler, and the unit's primary purpose is to transfer heat indirectly to a process material (liquid, gas, or solid) or to a heat transfer material for use in a process unit, instead of generating steam. Process heaters are devices in which the combustion gases do not directly come into contact with process materials. Process heaters do not include units used for comfort heat or space heat, food preparation for on-site consumption, or autoclaves.

Residual oil means crude oil, and all fuel oil numbers 4, 5 and 6, as defined by the American Society for Testing and Materials in ASTM D396–02a, “Standard Specifications for Fuel Oils¹” (incorporated by reference, see Section 63.14(b)).

Responsible official means responsible official as defined in 40 CFR 70.2.

Small gaseous fuel subcategory includes any firetube boiler that burns gaseous fuels not combined with any solid fuels and burns liquid fuel only during periods of gas curtailment or gas supply emergencies, and any boiler or process heater that burns gaseous fuels not combined with any solid fuels, burns liquid fuel only during periods of gas curtailment or gas supply emergencies, and has a rated capacity of less than or equal to 10 MMBTU per hour heat input.

Small liquid fuel subcategory includes any firetube boiler that does not burn any solid fuel and burns any liquid fuel either alone or in combination with gaseous fuels, and any boiler or process heater that does not burn any solid fuel and burns any liquid fuel either alone or in combination with gaseous fuels, and has a rated capacity of less than or equal to 10 MMBTU per hour heat input. Small gaseous fuel boilers and process heaters that burn liquid fuel during periods of gas

curtailment or gas supply emergencies are not included in this definition.

Small solid fuel subcategory includes any firetube boiler that burns any amount of solid fuel either alone or in combination with liquid or gaseous fuels, and any other boiler or process heater that burns any amount of solid fuel either alone or in combination with liquid or gaseous fuels and has a rated capacity of less than or equal to 10 MMBTU per hour heat input.

Solid fuel includes, but is not limited to, coal, wood, biomass, tires, plastics, and other nonfossil solid materials.

Temporary boiler means any gaseous or liquid fuel boiler that is designed to, and is capable of, being carried or moved from one location to another. A temporary boiler that remains at a location for more than 180 consecutive days is no longer considered to be a temporary boiler. Any temporary boiler that replaces a temporary boiler at a location and is intended to perform the same or similar function will be included in calculating the consecutive time period.

Total selected metals means the combination of the following metallic HAP: arsenic, beryllium, cadmium, chromium, lead, manganese, nickel and selenium.

Unadulterated wood means wood or wood products that have not been painted, pigment-stained, or pressure treated with compounds such as chromate copper arsenate, pentachlorophenol, and creosote. Plywood, particle board, oriented strand board, and other types of wood products bound by glues and resins are included in this definition.

Waste heat boiler means a device that recovers normally unused energy and converts it to usable heat. Waste heat boilers incorporating duct or supplemental burners that are designed to supply 50 percent or more of the total rated heat input capacity of the waste heat boiler are not considered waste heat boilers, but are considered boilers. Waste heat boilers are also referred to as heat recovery steam generators.

Watertube boiler means a boiler in which water passes through the tubes and hot gases of combustion pass over the outside surfaces of the tubes.

Wet scrubber means any add-on air pollution control device that mixes an aqueous stream or slurry with the exhaust gases from a boiler or process heater to control emissions of particulate matter and/or to absorb and neutralize acid gases, such as hydrogen chloride.

Work practice standard means any design, equipment, work practice, or operational standard, or combination thereof, that is promulgated pursuant to section 112(h) of the CAA.

Tables to Subpart DDDDD of Part 63

Table 1 to Subpart DDDDD of Part 63. - Emission Limits and Work Practice Standards

As stated in Section 63.7500, you must comply with the following applicable emission limits and work practice standards:

If your boiler or process heater is in this subcategory . . .	For the following pollutants . . .	You must meet the following emission limits and work practice standards . . .
1. New or reconstructed large solid fuel.	a. Particulate Matter (or Total Selected Metals).	0.025 lb per MMBTU of heat input; or (0.0003 lb per MMBTU of heat input).
	b. Hydrogen Chloride	0.02 lb per MMBTU of heat input.
	c. Mercury.....	0.000003 lb per MMBTU of heat input.
	d. Carbon Monoxide..	400 ppm by volume on a dry basis corrected to 7 percent oxygen (30-day rolling average for units 100 MMBTU/hr or greater, 3-run average for units less than 100 MMBTU/hr).
2. New or reconstructed limited use solid fuel.	a. Particulate Matter (or Total Selected Metals).	0.025 lb per MMBTU of heat input; or (0.0003 lb per MMBTU of heat input).
	b. Hydrogen Chloride	0.02 lb per MMBTU of heat input.
	c. Mercury.....	0.000003 lb per MMBTU of heat input.
	d. Carbon Monoxide..	400 ppm by volume on a dry basis corrected to 7 percent oxygen (3-run average).
3. New or reconstructed small solid fuel.	a. Particulate Matter (or Total Selected Metals).	0.025 lb per MMBTU of heat input; or (0.0003 lb per MMBTU of heat input).
	b. Hydrogen Chloride	0.02 lb per MMBTU of heat input.
	c. Mercury.....	0.000003 lb per MMBTU of heat input.
4. New reconstructed large liquid fuel.	a. Particulate Matter.	0.03 lb per MMBTU of heat input.
	b. Hydrogen Chloride	0.0005 lb per MMBTU of heat input.
	c. Carbon Monoxide..	400 ppm by volume on a dry basis corrected to 3 percent oxygen (30-day rolling average for units 100 MMBTU/hr or greater, 3-run average for units less than 100 MMBTU/hr).
5. New or reconstructed limited use liquid fuel.	a. Particulate Matter.	0.03 lb per MMBTU of heat input.
	b. Hydrogen Chloride	0.0009 lb per MMBTU of heat input.
	c. Carbon Monoxide..	400 ppm by volume on a dry basis liquid corrected to 3

		percent oxygen (3-run average).
6. New or reconstructed small liquid fuel.	a. Particulate Matter.	0.03 lb per MMBTU of heat input.
	b. Hydrogen Chloride	0.0009 lb per MMBTU of heat input.
7. New reconstructed large gaseous fuel.	Carbon Monoxide.....	400 ppm by volume on a dry basis corrected to 3 percent oxygen (30-day rolling average for units 100 MMBTU/hr or greater, 3-run average for units less than 100 MMBTU/hr).
8. New or reconstructed limited use gaseous fuel.	Carbon Monoxide.....	400 ppm by volume on a dry basis corrected to 3 percent oxygen (3-run average).
9. Existing large solid fuel	a. Particulate Matter (or Total Selected Metals).	0.07 lb per MMBTU of heat input; or (0.001 lb per MMBTU of heat input).
	b. Hydrogen Chloride	0.09 lb per MMBTU of heat input.
	c. Mercury.....	0.000009 lb per MMBTU of heat input.
10. Existing limited use solid fuel.	Particulate Matter (or Total Selected Metals).	0.21 lb per MMBTU of heat input; or (0.004 lb per MMBTU of heat input).

Table 2 to Subpart DDDDD of Part 63. - Operating Limits for Boilers and Process Heaters With Particulate Matter Emission Limits

As stated in Section 63.7500, you must comply with the applicable operating limits:

If you demonstrate compliance with applicable particulate matter emission limits using . . .	You must meet these operating limits . . .
1. Wet scrubber control.....	a. Maintain the minimum pressure drop and liquid flow-rate at or above the operating levels established during the performance test according to Section 63.7530(c) and Table 7 to this subpart that demonstrated compliance with the applicable emission limit for particulate matter.
2. Fabric filter control.....	a. Install and operate a bag leak detection system according to Section 63.7525 and operate the fabric filter such that the bag leak detection system alarm does not sound more than 5 percent of the operating time during each 6-month period; or b. This option is for boilers and process heaters that operate dry control systems. Existing boilers and process heaters must maintain opacity to less than or equal to 20 percent (6-minute average) except for one 6-minute period per hour of not more than 27 percent. New boilers and process heaters must maintain opacity to less than or equal to 10 percent opacity (1-

- hour block average).
3. Electrostatic precipitator control.
- a. This option is for boilers and process heaters that operate dry control systems. Existing boilers and process heaters must maintain opacity to less than or equal to 20 percent (6-minute average) except for one 6-minute period per hour of not more than 27 percent. New boilers and process heaters must maintain opacity to less than or equal to 10 percent opacity (1-hour block average); or
- b. This option is only for boilers and process heaters that operate additional wet control systems. Maintain the minimum voltage and secondary current or total power input of the electrostatic precipitator at or above the operating limits established during the performance test according to Section 63.7530(c) and Table 7 to this subpart that demonstrated compliance with the applicable emission limit for particulate matter.
4. Any other control type..... This option is for boilers and process heaters that operate dry control systems. Existing boilers and process heaters must maintain opacity to less than or equal to 20 percent (6-minute average) except for one 6-minute period per hour of not more than 27 percent. New boilers and process heaters must maintain opacity to less than or equal to 10 percent opacity (1-hour block average).

Table 3 to Subpart DDDDD of Part 63. - Operating Limits for Boilers and Process Heaters With Mercury Emission Limits and Boilers and Process Heaters That Choose To Comply With the Alternative Total Selected Metals Emission Limits

As stated in Section 63.7500, you must comply with the applicable operating limits:

- | | |
|---|---|
| <p>If you demonstrate compliance with applicable mercury and/or total selected metals emission limits using . . .</p> | <p>You must meet these operating limits . . .</p> |
|---|---|
-
1. Wet scrubber control..... Maintain the minimum pressure drop and liquid flow-rate at or above the operating levels established during the performance test according to Section 63.7530(c) and Table 7 to this subpart that demonstrated compliance with the applicable emission limits for mercury and/or total selected metals.
2. Fabric filter control.....
- a. Install and operate a bag leak detection system according to Section 63.7525 and operate the fabric filter such that the bag leak detection system alarm does not sound more than 5 percent of the operating time during a 6-month period; or
- b. This option is for boilers and process heaters that operate dry control systems. Existing sources must maintain opacity to less than

- or equal to 20 percent (6-minute average) except for one 6-minute period per hour of not more than 27 percent. New sources must maintain opacity to less than or equal to 10 percent opacity (1-hour block average).
- 3. Electrostatic precipitator control.
 - a. This option is for boilers and process heaters that operate dry control systems. Existing sources must maintain opacity to less than or equal to 20 percent (6-minute average) except for one 6-minute period per hour of not more than 27 percent. New sources must maintain opacity to less than or equal to 10 percent opacity (1-hour block average); or
 - b. This option is only for boilers and process heaters that operate additional wet control systems. Maintain the minimum voltage and secondary current or total power input of the electrostatic precipitator at or above the operating limits established during the performance test according to Section 63.7530(c) and Table 7 to this subpart that demonstrated compliance with the applicable emission limits for mercury and/or total selected metals.
 - 4. Dry scrubber or carbon injection control. Maintain the minimum sorbent or carbon injection rate at or above the operating levels established during the performance test according to Section 63.7530(c) and Table 7 to this subpart that demonstrated compliance with the applicable emission limit for mercury.
 - 5. Any other control type..... This option is only for boilers and process heaters that operate dry control systems. Existing sources must maintain opacity to less than or equal to 20 percent (6-minute average) except for one 6-minute period per hour of not more than 27 percent. New sources must maintain opacity to less than or equal to 10 percent opacity (1-hour block average).
 - 6. Fuel analysis..... Maintain the fuel type or fuel mixture such that the mercury and/or total selected metals emission rates calculated according to Section 63.7530(d)(4) and/or (5) is less than the applicable emission limits for mercury and/or total selected metals.

Table 4 to Subpart DDDDD of Part 63. - Operating Limits for Boilers and Process Heaters With Hydrogen Chloride Emission Limits

As stated in Section 63.7500, you must comply with the following applicable operating limits:

- | | |
|---|---|
| If you demonstrate compliance with applicable hydrogen chloride emission limits using . . . | You must meet these operating limits . . . |
| 1. Wet scrubber control..... | Maintain the minimum scrubber effluent pH, pressure drop, and |

- liquid flow-rate at or above the operating levels established during the performance test according to Section 63.7530(c) and Table 7 to this subpart that demonstrated compliance with the applicable emission limit for hydrogen chloride.
2. Dry scrubber control..... Maintain the minimum sorbent injection rate at or above the operating levels established during the performance test according to Section 63.7530(c) and Table 7 to this subpart that demonstrated compliance with the applicable emission limit for hydrogen chloride.
3. Fuel analysis..... Maintain the fuel type or fuel mixture such that the hydrogen chloride emission rate calculated according to Section 63.7530(d)(3) is less than the applicable emission limit for hydrogen chloride.

Table 5 to Subpart DDDDD of Part 63. - Performance Testing Requirements

As stated in Section 63.7520, you must comply with the following requirements for performance test for existing, new or reconstructed affected sources:

To conduct a performance test for the following pollutant . . .	You must . . .	Using . . .
1. Particulate Matter.....	a. Select sampling ports location and the number of traverse points.	Method 1 in appendix A to part 60 of this chapter.
	b. Determine velocity and volumetric flow-rate of the stack gas.	Method 2, 2F, or 2G in appendix A to part 60 of this chapter.
	c. Determine oxygen and carbon dioxide concentrations of the stack gas.	Method 3A or 3B in appendix A to part 60 of this chapter, or ASME PTC 19, Part 10 (1981) (IBR, see Section 63.14(i)).
	d. Measure the moisture content of the stack gas.	Method 4 in appendix A to part 60 of this chapter.
	e. Measure the particulate matter emission concentration.	Method 5 or 17 (positive pressure fabric filters must use Method 5D) in appendix A to part 60 of this chapter.
	f. Convert emissions concentration to lb per MMBTU emission rates.	Method 19 F-factor methodology in appendix A to part 60 of this chapter.
2. Total selected metals....	a. Select sampling ports location and the number of traverse points.	Method 1 in appendix A to part 60 of this chapter.
	b. Determine velocity and volumetric flow-rate of the stack gas.	Method 2, 2F, or 2G in appendix A to part 60 of this chapter.
	c. Determine oxygen	Method 3A or 3B in

- | | | |
|---------------------------|---|---|
| | and carbon dioxide concentrations of the stack gas. | appendix A to part 60 of this chapter, or ASME PTC 19, Part 10 (1981) (IBR, see Section 63.14(i)). |
| | d. Measure the moisture content of the stack gas. | Method 4 in appendix A to part 60 of this chapter. |
| | e. Measure the total selected metals emission concentration. | Method 29 in appendix A to part 60 of this chapter. |
| | f. Convert emissions concentration to lb per MMBTU emission rates. | Method 19 F-factor methodology in appendix A to part 60 of this chapter. |
| 3. Hydrogen chloride..... | a. Select sampling ports location and the number of traverse points. | Method 1 in appendix A to part 60 of this chapter. |
| | b. Determine velocity and volumetric flow-rate of the stack gas. | Method 2, 2F, or 2G in appendix A to part 60 of this chapter. |
| | c. Determine oxygen and carbon dioxide concentrations of the stack gas. | Method 3A or 3B in appendix A to part 60 of this chapter, or ASME PTC 19, Part 10 (1981) (IBR, see Section 63.14(i)). |
| | d. Measure the moisture content of the stack gas. | Method 4 in appendix A to part 60 of this chapter. |
| | e. Measure the hydrogen chloride emission concentration. | Method 26 or 26A in appendix A to part 60 of this chapter. |
| | f. Convert emissions concentration to lb per MMBTU emission rates. | Method 19 F-factor methodology in appendix A to part 60 of this chapter. |
| 4. Mercury..... | a. Select sampling ports location and the number of traverse points. | Method 1 in appendix A to part 60 of this chapter. |
| | b. Determine velocity and volumetric flow-rate of the stack gas. | Method 2, 2F, or 2G in appendix A to part 60 of this chapter. |
| | c. Determine oxygen and carbon dioxide concentrations of the stack gas. | Method 3A or 3B in appendix A to part 60 of this chapter, or ASME PTC 19, Part 10 (1981) (IBR, see Section 62.14(i)). |
| | d. Measure the moisture content of the stack gas. | Method 4 in appendix A to part 60 of this chapter. |
| | e. Measure the mercury emission concentration. | Method 29 in appendix A to part 60 of this chapter or Method 101A in appendix B to part 61 of this chapter or ASTM Method D6784-02 (IBR, see Section 63.14(b)). |
| | f. Convert emissions concentration to lb per MMBTU emission | Method 19 F-factor methodology in appendix A to part |

5. Carbon Monoxide.....	<p>rates.</p> <p>a. Select the sampling ports location and the number of traverse points.</p> <p>b. Determine oxygen and carbon dioxide concentrations of the stack gas.</p> <p>c. Measure the moisture content of the stack gas.</p> <p>d. Measure the carbon monoxide emission concentration.</p>	<p>60 of this chapter.</p> <p>Method 1 in appendix A to part 60 of this chapter.</p> <p>Method 3A or 3B in appendix A to part 60 of this chapter, or ASTM D6522-00 (IBR, see Section 63.14(b)), or ASME PTC 19, Part 10 (1981) (IBR, see Section 63.14(i)).</p> <p>Method 4 in appendix A to part 60 of this chapter.</p> <p>Method 10, 10A, or 10B in appendix A to part 60 of this chapter, or ASTM D6522-00 (IBR, see Section 63.14(b)) when the fuel is natural gas.</p>
-------------------------	---	--

Table 6 to Subpart DDDDD of Part 63. - Fuel Analysis Requirements

As stated in Section 63.7521, you must comply with the following requirements for fuel analysis testing for existing, new or reconstructed affected sources:

To conduct a fuel analysis for the following pollutant	You must . . .	Using . . .
1. Mercury.....	<p>a. Collect fuel samples.</p> <p>b. Composite fuel samples.</p> <p>c. Prepare composited fuel samples.</p> <p>d. Determine heat content of the fuel type.</p> <p>e. Determine moisture content of the fuel type.</p>	<p>Procedure in Section 63.7521(c) or ASTM D2234-00 \1\ (for coal)(IBR, see Section 63.14(b)) or ASTM D6323-98 (2003)(for biomass)(IBR, see Section 63.14(b)) or equivalent.</p> <p>Procedure in Section 63.7521(d) or equivalent.</p> <p>SW-846-3050B (for solid samples) or SW-846-3020A (for liquid samples) or ASTM D2013-01 (for coal) (IBR, see Section 63.14(b)) or ASTM D5198-92 (2003) (for biomass)(IBR, see Section 63.14(b)) or equivalent.</p> <p>ASTM D5865-03a (for coal)(IBR, see Section 63.14(b)) or ASTM E711-87 (1996) (for biomass)(IBR, see Section 63.14(b)) or equivalent.</p> <p>ASTM D3173-02 (IBR, see Section 63.14(b)) or ASTM E871-82 (1998)(IBR,</p>

- see Section 63.14(b)) or equivalent.
- f. Measure mercury concentration in fuel sample. ASTM D3684-01 (for coal)(IBR, see Section 63.14(b)) or SW-846-7471A (for solid samples) or SW-846 7470A (for liquid samples).
- g. Convert concentrations into units of pounds of pollutant per MMBTU of heat content.
2. Total selected metals....
- a. Collect fuel samples. Procedure in Section 63.7521(c) or ASTM D2234-00 \1\ (for coal)(IBR, see Section 63.14(b)) or ASTM D6323-98 (2003) (for biomass)(IBR, see Section 63.14(b)) or equivalent.
- b. Composite fuel samples. Procedure in Section 63.7521(d) or equivalent.
- c. Prepare composited fuel samples. SW-846-3050B (for solid samples) or SW-846-3020A (for liquid samples) or ASTM D2013-01 (for coal)(IBR, see Section 63.14(b)) or ASTM D5198-92 (2003)(for biomass)(IBR, see Section 63.14(b)) or equivalent.
- d. Determine heat content of the fuel type. ASTM D5865-03a (for coal)(IBR, see Section 63.14(b)) or ASTM E 711-87 (for biomass)(IBR, see Section 63.14(b)) or equivalent.
- e. Determine moisture content of the fuel type. ASTM D3173-02 (IBR, see Section 63.14(b)) or ASTM E871 (IBR, see Section 63.14(b)) or equivalent.
- f. Measure total selected metals concentration in fuel sample. SW-846-6010B or ASTM D3683-94 (2000) (for coal) (IBR, see Section 63.14(b)) or ASTM E885-88 (1996) (for biomass)(IBR, see Section 63.14(b)).
- g. Convert concentrations into units of pounds of pollutant per MMBTU of heat content.
3. Hydrogen chloride.....
- a. Collect fuel samples. Procedure in Section 63.7521(c) or ASTM D2234 \1\ (for coal)(IBR, see Section 63.14(b)) or ASTM D6323-98 (2003) (for biomass)(IBR, see Section 63.14(b)) or

- b. Composite fuel samples. equivalent. Procedure in Section 63.7521(d) or equivalent.
- c. Prepare composited fuel samples. SW-846-3050B (for solid samples) or SW-846-3020A (for liquid samples) or ASTM D2013-01 (for coal)(IBR, see Section 63.14(b)) or ASTM D5198-92 (2003) (for biomass)(IBR, see Section 63.14(b)) or equivalent.
- d. Determine heat content of the fuel type. ASTM D5865-03a (for coal)(IBR, see Section 63.14(b)) or ASTM E711-87 (1996) (for biomass)(IBR, see Section 63.14(b)) or equivalent.
- e. Determine moisture content of the fuel type. ASTM D3173-02 (IBR, see Section 63.14(b)) or ASTM E871-82 (1998)(IBR, see Section 63.14(b)) or equivalent.
- f. Measure chlorine concentration in fuel sample. SW-846-9250 or ASTM E776-87 (1996) (for biomass)(IBR, see Section 63.14(b)) or equivalent.
- g. Convert concentrations into units of pounds of pollutant per MMBTU of heat content.

Table 7 to Subpart DDDDD of Part 63. - Establishing Operating Limits

As stated in Section 63.7520, you must comply with the following requirements for establishing operating limits:

If you have an applicable emission limit for . . . requirements	And your operating limits are based on . . .	You must . . .	Using .
1. Particulate matter, mercury, or from the pressure total selected metals. flow rate pressure drop and liquid the flow-rate data every 15 matter, minutes during the entire total selected period of the performance performance test. tests;	a. Wet scrubber operating parameters.	i. Establish a site-specific minimum pressure drop and minimum flow rate operating limit according to Section 63.7530(c).	(1) Data drop and liquid monitors and particulate mercury, or metals
(b) Determine the average pressure drop and liquid flow-rate for each individual test run in the			

three-run performance test
by computing the average
of all the 15-minute
readings taken during each
test run.

the pressure (a) You must collect b. Electrostatic
flow rate voltage and secondary precipitator operating
the current or total power parameters (option only
matter, input data every 15 for units with additional
total selected minutes during the entire wet scrubber control).
performance test. period of the performance

i. Establish a site-
specific minimum voltage
and secondary current or
total power input
according to Section
63.7530(c).

(1) Data from
drop and liquid
monitors and
particulate
mercury, or
metals

tests;

(b) Determine the average
voltage and secondary
current or total power
input for each individual
test run in the three-run
performance test by
computing the average of
all the 15-minute readings
taken during each test

run.
2. Hydrogen Chloride..... a. Wet scrubber operating
the pH, (a) You must collect pH, parameters.
and liquid pressure drop, and liquid
monitors and the flow-rate data every 15
chloride minutes during the entire
test. period of the performance

i. Establish a site-
specific minimum pressure
drop and minimum flow rate
operating limit according
to Section 63.7530(c).

(1) Data from
pressure drop,
flow-rate
hydrogen
performance

tests;

(b) Determine the average
pH, pressure drop, and
liquid flow-rate for each
individual test run in the
three-run performance test
by computing the average
of all the 15-minute
readings taken during each
test run.

<p>the sorbent monitors chloride test.</p>	<p>(a) You must collect sorbent injection rate data every 15 minutes during the entire period of the performance tests;</p> <p>(b) Determine the average sorbent injection rate for each individual test run in the three-run performance test by computing the average of all the 15-minute readings taken during each test run.</p>	<p>b. Dry scrubber operating parameters.</p>	<p>i. Establish a site-specific minimum sorbent injection rate operating limit according to Section 63.7530(c).</p>	<p>(1) Data from injection rate and hydrogen performance</p>
--	---	--	---	--

Table 8 to Subpart DDDDD of Part 63. - Demonstrating Continuous Compliance

As stated in Section 63.7540, you must show continuous compliance with the emission limitations for affected sources according to the following:

If you must meet the following operating limits or work practice standards . . .	You must demonstrate continuous compliance by . . .
<p>1. Opacity.....</p>	<p>a. Collecting the opacity monitoring system data according to Section 63.7525(b) and 63.7535; and</p> <p>b. Reducing the opacity monitoring data to 6-minute averages; and</p> <p>c. Maintaining opacity to less than or equal to 20 percent (6-minute average) except for one 6-minute period per hour of not more than 27 percent for existing sources; or maintaining opacity to less than or equal to 10 percent (1-hour block average) for new sources.</p>
<p>2. Fabric Filter Bag Leak Detection Operation.</p>	<p>Installing and operating a bag leak detection system according to Section 63.7525 and operating the fabric filter such that the requirements in Section 63.7540(a)(9) are met.</p>
<p>3. Wet Scrubber Pressure Drop and Liquid Flow-rate.</p>	<p>a. Collecting the pressure drop and liquid flow rate monitoring system data according to Section 63.7525 and 63.7535; and</p> <p>b. Reducing the data to 3-hour block averages; and</p> <p>c. Maintaining the 3-hour average pressure drop and liquid flow-rate at or above the operating limits established during the performance test according to Section 63.7530(c).</p>
<p>4. Wet Scrubber pH.....</p>	<p>a. Collecting the pH monitoring</p>

- system data according to Section 63.7525 and 63.7535; and
- b. Reducing the data to 3-hour block averages; and
 - c. Maintaining the 3-hour average pH at or above the operating limit established during the performance test according to Section 63.7530(c).
5. Dry Scrubber Sorbent or Carbon Injection Rate.
- a. Collecting the sorbent or carbon injection rate monitoring system data for the dry scrubber according to Section 63.7525 and 63.7535; and
 - b. Reducing the data to 3-hour block averages; and
 - c. Maintaining the 3-hour average sorbent or carbon injection rate at or above the operating limit established during the performance test according to Section 63.7530(c).
6. Electrostatic Precipitator Secondary Current and Voltage or Total Power Input.
- a. Collecting the secondary current and voltage or total power input monitoring system data for the electrostatic precipitator according to Section 63.7525 and 63.7535; and
 - b. Reducing the data to 3-hour block averages; and
 - c. Maintaining the 3-hour average secondary current and voltage or total power input at or above the operating limits established during the performance test according to Section 63.7530(c).
7. Fuel Pollutant Content.....
- a. Only burning the fuel types and fuel mixtures used to demonstrate compliance with the applicable emission limit according to Section 63.7530(c) or (d) as applicable; and
 - b. Keeping monthly records of fuel use according to Section 63.7540(a).

Table 9 to Subpart DDDDD of Part 63. - Reporting Requirements

As stated in Section 63.7550, you must comply with the following requirements for reports:

You must submit a(n)	The report must contain . . .	You must submit the report . . .
1. Compliance report.....	<ul style="list-style-type: none"> a. Information required in Section 63.7550(c)(1) through (11); and b. If there are no deviations from any emission limitation (emission limit and operating limit) that applies to you and there are no deviations from the requirements for work practice standards in Table 8 to this subpart that apply to you, a statement that 	Semiannually according to the requirements in Section 63.7550(b).

there were no deviations from the emission limitations and work practice standards during the reporting period. If there were no periods during which the CMSs, including continuous emissions monitoring system, continuous opacity monitoring system, and operating parameter monitoring systems, were out-of-control as specified in Section 63.8(c)(7), a statement that there were no periods during which the CMSs were out-of-control during the reporting period; and

c. If you have a deviation from any emission limitation (emission limit and operating limit) or work practice standard during the reporting period, the report must contain the information in Section 63.7550(d). If there were periods during which the CMSs, including continuous emissions monitoring system, continuous opacity monitoring system, and operating parameter monitoring systems, were out-of-control, as specified in Section 63.8(c)(7), the report must contain the information in Section 63.7550(e); and

d. If you had a startup, shutdown, or malfunction during the reporting period and you took actions consistent with your startup, shutdown, and malfunction plan, the compliance report must include the information in

2. An immediate startup, shutdown, and malfunction report if you had a startup, shutdown, or malfunction during the reporting period that is not consistent with your startup, shutdown, and malfunction plan, and the source exceeds any applicable emission limitation in the relevant emission standard.
- Section 63.10(d)(5)(i)
- a. Actions taken for the event; and
- i. By fax or telephone within 2 working days after starting actions inconsistent with the plan; and
- b. The information in Section 63.10(d)(5)(ii)
- ii. By letter within 7 working days after the end of the event unless you have made alternative arrangements with the permitting authority.

Table 10 to Subpart DDDDD of Part 63. - Applicability of General Provisions to Subpart DDDDD

As stated in Section 63.7565, you must comply with the applicable General Provisions according to the following:

Citation	Subject	Brief description	Applicable
Section 63.1.....	Applicability.....	Initial Applicability Determination; Applicability After Standard Established; Permit Requirements; Extensions, Notifications.	Yes.
Section 63.2.....	Definitions.....	Definitions for part 63 standards.	Yes.
Section 63.3.....	Units and Abbreviations...	Units and abbreviations for part 63 standards.	Yes.
Section 63.4.....	Prohibited Activities.....	Prohibited Activities; Compliance date; Circumvention, Severability.	Yes.
Section 63.5.....	Construction/ Reconstruction.	Applicability; applications; approvals.	Yes.
Section 63.6(a).....	Applicability.....	GP apply unless compliance extension; and GP apply to area sources that become major.	Yes.
Section 63.6(b)(1)-(4).....	Compliance Dates for New and Reconstructed sources.	Standards apply at effective date; 3 years after effective date; upon startup; 10 years after construction or reconstruction commences for 112(f).	Yes.
Section 63.6(b)(5).....	Notification.....	Must notify if commenced construction or reconstruction after proposal.	Yes.
Section 63.6(b)(6).....	[Reserved]		
Section 63.6(b)(7).....	Compliance Dates for New and Reconstructed Area Sources That Become Major.	Area sources that become major must comply with major source standards immediately upon becoming major, regardless of whether required to comply when they were an area source.	Yes.
Section 63.6(c)(1)-(2).....	Compliance Dates for Existing Sources.	Comply according to date in subpart, which must be	Yes.

		no later than 3 years after effective date; and for 112(f) standards, comply within 90 days of effective date unless compliance extension.	
Section 63.6(c)(3)-(4)	[Reserved]		
Section 63.6(c)(5)	Compliance Dates for Existing Area Sources That Become Major.	Area sources that become major must comply with major source standards by date indicated in subpart or by equivalent time period (for example, 3 years).	Yes.
Section 63.6(d)	[Reserved]		
Section 63.6(e)(1)-(2)	Operation & Maintenance.	Operate to minimize emissions at all times; and Correct malfunctions as soon as practicable; and Operation and maintenance requirements independently enforceable; information Administrator will use to determine if operation and maintenance requirements were met.	Yes.
Section 63.6(e)(3)	Startup, Shutdown, and Malfunction Plan (SSMP).	Requirement for SSM and startup, shutdown, malfunction plan; and content of SSMP.	Yes.
Section 63.6(f)(1)	Compliance Except During SSM.	Comply with emission standards at all times except during SSM.	Yes.
Section 63.6(f)(2)-(3)	Methods for Determining Compliance.	Compliance based on performance test, operation and maintenance plans, records, inspection.	Yes.
Section 63.6(g)(1)-(3)	Alternative Standard	Procedures for getting an alternative standard.	Yes.
Section 63.6(h)(1)	Compliance with Opacity/VE Standards.	Comply with opacity/VE emission limitations at all times except during SSM.	Yes.
Section 63.6(h)(2)(i)	Determining Compliance with Opacity/Visible Emission (VE) Standards.	If standard does not state test method, use Method 9 for opacity and Method 22 for VE.	No.
Section 63.6(h)(2)(ii)	[Reserved]		
Section 63.6(h)(2)(iii)	Using Previous Tests to Demonstrate Compliance with Opacity/VE Standards	Criteria for when previous opacity/VE testing can be used to show compliance with this subpart.	Yes.
Section 63.6(h)(3)	[Reserved]		
Section 63.6(h)(4)	Notification of Opacity/VE Observation Date.	Notify Administrator of anticipated date of observation.	No.
Section 63.6(h)(5)(i),(iii)-(v)	Conducting Opacity/VE Observations.	Dates and Schedule for conducting opacity/VE observations.	No.
Section 63.6(h)(5)(ii)	Opacity Test Duration and Averaging Times.	Must have at least 3 hours of observation with thirty, 6-minute averages.	No.
Section 63.6(h)(6)	Records of Conditions During Opacity/VE observations.	Keep records available and allow Administrator to inspect.	No.
Section 63.6(h)(7)(i)	Report continuous opacity monitoring system Monitoring Data from Performance Test.	Submit continuous opacity monitoring system data with other performance test data.	Yes.
Section 63.6(h)(7)(ii)	Using continuous opacity monitoring system instead of Method 9.	Can submit continuous opacity monitoring system data instead of Method 9 results even if subpart	No.

		requires Method 9, but must notify Administrator before performance test.	
Section 63.6(h)(7)(iii).....	Averaging time for continuous opacity monitoring system during performance test.	To determine compliance, must reduce continuous opacity monitoring system data to 6-minute averages.	Yes.
Section 63.6(h)(7)(iv).....	Continuous opacity monitoring system requirements.	Demonstrate that continuous opacity monitoring system performance evaluations are conducted according to Section 63.8(e), continuous opacity monitoring systems are properly maintained and operated according to Section 63.8(c) and data quality as Section 63.8(d).	Yes.
Section 63.6(h)(7)(v).....	Determining Compliance with Opacity/VE Standards.	Continuous opacity monitoring system is probative but not conclusive evidence of compliance with opacity standard, even if Method 9 observation shows otherwise. Requirements for continuous opacity monitoring system to be probative evidence-proper maintenance, meeting PS 1, and data have not been altered.	Yes.
Section 63.6(h)(8).....	Determining Compliance with Opacity/VE Standards.	Administrator will use all continuous opacity monitoring system, Method 9, and Method 22 results, as well as information about operation and maintenance to determine compliance.	Yes.
Section 63.6(h)(9).....	Adjusted Opacity Standard.	Procedures for Administrator to adjust an opacity standard.	Yes.
Section 63.6(i)(1)-(14).....	Compliance Extension.....	Procedures and criteria for Administrator to grant compliance extension.	Yes.
Section 63.6(j).....	Presidential Compliance Exemption.	President may exempt source category from requirement to comply with rule.	Yes.
Section 63.7(a)(1).....	Performance Test Dates....	Dates for Conducting Initial Performance Testing and Other Compliance Demonstrations.	Yes.
Section 63.7(a)(2).....	Performance Test Dates....	New source with initial startup date before effective date has 180 days after effective date to demonstrate compliance	Yes.
Section 63.7(a)(2)(ii-viii).....	[Reserved]		
Section 63.7(a)(2)(ix).....	Performance Test Dates....	1. New source that commenced construction between proposal and promulgation dates, when promulgated standard is more stringent than proposed standard, has 180 days after effective date or 180 days after startup of source, whichever is later, to demonstrate compliance; and.	Yes.

		2. If source initially demonstrates compliance with less stringent proposed standard, it has 3 years and 180 days after the effective date of the standard or 180 days after startup of source, whichever is later, to demonstrate compliance with promulgated standard.	No.
Section 63.7(a)(3).....	Section 114 Authority.....	Administrator may require a performance test under CAA Section 114 at any time.	Yes.
Section 63.7(b)(1).....	Notification of Performance Test.	Must notify Administrator 60 days before the test.	No.
Section 63.7(b)(2).....	Notification of Rescheduling.	If rescheduling a performance test is necessary, must notify Administrator 5 days before scheduled date of rescheduled date.	Yes.
Section 63.7(c).....	Quality Assurance/Test Plan.	Requirement to submit site-specific test plan 60 days before the test or on date Administrator agrees with: test plan approval procedures; and performance audit requirements; and internal and external QA procedures for testing.	Yes.
Section 63.7(d).....	Testing Facilities.....	Requirements for testing facilities.	Yes.
Section 63.7(e)(1).....	Conditions for Conducting Performance Tests.	1. Performance tests must be conducted under representative conditions; and 2. Cannot conduct performance tests during SSM; and 3. Not a deviation to exceed standard during SSM; and 4. Upon request of Administrator, make available records necessary to determine conditions of performance tests.	No. Yes. Yes. Yes.
Section 63.7(e)(2).....	Conditions for Conducting Performance Tests.	Must conduct according to rule and EPA test methods unless Administrator approves alternative.	Yes.
Section 63.7(e)(3).....	Test Run Duration.....	Must have three separate test runs; and Compliance is based on arithmetic mean of three runs; and conditions when data from an additional test run can be used.	Yes.
Section 63.7(e)(4).....	Interaction with other sections of the Act.	Nothing in Section 63.7(e)(1) through (4) can abrogate the Administrator's authority to require testing under Section 114 of the Act.	Yes.
Section 63.7(f).....	Alternative Test Method...	Procedures by which Administrator can grant approval to use an alternative test method.	Yes.
Section 63.7(g).....	Performance Test Data Analysis.	Must include raw data in performance test report;	Yes.

			and must submit performance test data 60 days after end of test with the Notification of Compliance Status; and keep data for 5 years.	
Section 63.7(h)	Waiver of Tests		Procedures for Administrator to waive performance test.	Yes.
Section 63.8(a)(1)	Applicability of Monitoring Requirements.		Subject to all monitoring requirements in standard.	Yes.
Section 63.8(a)(2)	Performance Specifications		Performance Specifications in appendix B of part 60 apply.	Yes.
Section 63.8(a)(3)	[Reserved]			
Section 63.8(a)(4)	Monitoring with Flares		Unless your rule says otherwise, the requirements for flares in Section 63.11 apply.	No.
Section 63.8(b)(1)(i)-(ii)	Monitoring		Must conduct monitoring according to standard unless Administrator approves alternative.	Yes.
Section 63.8(b)(1)(iii)	Monitoring		Flares not subject to this section unless otherwise specified in relevant standard.	No.
Section 63.8(b)(2)-(3)	Multiple Effluents and Multiple Monitoring Systems.		Specific requirements for installing monitoring systems; and must install on each effluent before it is combined and before it is released to the atmosphere unless Administrator approves otherwise; and if more than one monitoring system on an emission point, must report all monitoring system results, unless one monitoring system is a backup.	Yes.
Section 63.8(c)(1)	Monitoring System Operation and Maintenance.		Maintain monitoring system in a manner consistent with good air pollution control practices.	Yes.
Section 63.8(c)(1)(i)	Routine and Predictable SSM.		Maintain and operate CMS according to Section 63.6(e)(1).	Yes.
Section 63.8(c)(1)(ii)	SSM not in SSMP		Must keep necessary parts available for routine repairs of CMSs.	Yes.
Section 63.8(c)(1)(iii)	Compliance with Operation and Maintenance Requirements.		Must develop and implement an SSMP for CMSs.	Yes.
Section 63.8(c)(2)-(3)	Monitoring System Installation.		Must install to get representative emission and parameter measurements; and must verify operational status before or at performance test.	Yes.
Section 63.8(c)(4)	Continuous Monitoring System (CMS) Requirements.		CMSs must be operating except during breakdown, out-of-control, repair, maintenance, and high-level calibration drifts.	No.
Section 63.8(c)(4)(i)	Continuous Monitoring System (CMS) Requirements.		Continuous opacity monitoring system must have a minimum of one cycle of sampling and analysis for each successive 10-second period and one cycle of	Yes.

Section 63.8(c)(4)(ii).....	Continuous Monitoring System (CMS) Requirements.	data recording for each successive 6-minute period. Continuous emissions monitoring system must have a minimum of one cycle of operation for each successive 15-minute period.	No.
Section 63.8(c)(5).....	Continuous Opacity Monitoring system (COMS) Requirements.	Must do daily zero and high level calibrations.	Yes.
Section 63.8(c)(6).....	Continuous Monitoring System (CMS) Requirements.	Must do daily zero and high level calibrations.	No.
Section 63.8(c)(7)-(8).....	Continuous Monitoring Systems Requirements.	Out-of-control periods, including reporting.	Yes.
Section 63.8(d).....	Continuous Monitoring Systems Quality Control.	Requirements for continuous monitoring systems quality control, including calibration, etc.; and must keep quality control plan on record for the life of the affected source. Keep old versions for 5 years after revisions.	Yes.
Section 63.8(e).....	Continuous monitoring systems Performance Evaluation.	Notification, performance evaluation test plan, reports.	Yes.
Section 63.8(f)(1)-(5).....	Alternative Monitoring Method.	Procedures for Administrator to approve alternative monitoring.	Yes.
Section 63.8(f)(6).....	Alternative to Relative Accuracy Test.	Procedures for Administrator to approve alternative relative accuracy tests for continuous emissions monitoring system.	No.
Section 63.8(g)(1)-(4).....	Data Reduction.....	Continuous opacity monitoring system 6-minute averages calculated over at least 36 evenly spaced data points; and continuous emissions monitoring system 1-hour averages computed over at least 4 equally spaced data points.	Yes.
Section 63.8(g)(5).....	Data Reduction.....	Data that cannot be used in computing averages for continuous emissions monitoring system and continuous opacity monitoring system.	No.
Section 63.9(a).....	Notification Requirements.	Applicability and State Delegation.	Yes.
Section 63.9(b)(1)-(5).....	Initial Notifications.....	Submit notification 120 days after effective date; and Notification of intent to construct/reconstruct; and Notification of commencement of construct/reconstruct; Notification of startup; and Contents of each.	Yes.
Section 63.9(c).....	Request for Compliance Extension.	Can request if cannot comply by date or if installed BACT/LAER.	Yes.
Section 63.9(d).....	Notification of Special Compliance Requirements for New Source.	For sources that commence construction between proposal and promulgation and want to comply 3 years after effective	Yes.

Section 63.9(e)	Notification of Performance Test.	date. Notify Administrator 60 days prior.	No.
Section 63.9(f)	Notification of VE/Opacity Test.	Notify Administrator 30 days prior.	No.
Section 63.9(g)	Additional Notifications When Using Continuous Monitoring Systems.	Notification of performance evaluation; and notification using continuous opacity monitoring system data; and notification that exceeded criterion for relative accuracy.	Yes.
Section 63.9(h)(1)-(6)	Notification of Compliance Status.	Contents; and due 60 days after end of performance test or other compliance demonstration, and when to submit to Federal vs. State authority.	Yes.
Section 63.9(i)	Adjustment of Submittal Deadlines.	Procedures for Administrator to approve change in when notifications must be submitted.	Yes.
Section 63.9(j)	Change in Previous Information.	Must submit within 15 days after the change.	Yes.
Section 63.10(a)	Recordkeeping/Reporting...	Applies to all, unless compliance extension; and when to submit to Federal vs. State authority; and procedures for owners of more than 1 source.	Yes.
Section 63.10(b)(1)	Recordkeeping/Reporting...	General Requirements; and keep all records readily available and keep for 5 years.	Yes.
Section 63.10(b)(2)(i)-(v)	Records related to Startup, Shutdown, and Malfunction.	Occurrence of each of operation (process, equipment); and occurrence of each malfunction of air pollution equipment; and maintenance of air pollution control equipment; and actions during startup, shutdown, and malfunction.	Yes.
Section 63.10(b)(2)(vi) and (x-xi)	Continuous monitoring systems Records.	Malfunctions, inoperative, out-of-control; and calibration checks; and adjustments, maintenance.	Yes.
Section 63.10(b)(2)(vii)-(ix)	Records.....	Measurements to demonstrate compliance with emission limitations; and performance test, performance evaluation, and visible emission observation results; and measurements to determine conditions of performance tests and performance evaluations.	Yes.
Section 63.10(b)(2)(xii)	Records.....	Records when under waiver.	Yes.
Section 63.10(b)(2)(xiii)	Records.....	Records when using alternative to relative accuracy test.	No.
Section 63.10(b)(2)(xiv)	Records.....	All documentation supporting Initial Notification and Notification of Compliance Status.	Yes.
Section 63.10(b)(3)	Records.....	Applicability Determinations.	Yes.
Section 63.10(c)(1),(5)-(8),(10)-	Records.....	Additional Records for	Yes.

(15).		continuous monitoring systems.	
Section 63.10(c)(7)-(8)	Records	Records of excess emissions and parameter monitoring exceedances for continuous monitoring systems.	No.
Section 63.10(d)(1)	General Reporting Requirements.	Requirement to report	Yes.
Section 63.10(d)(2)	Report of Performance Test Results.	When to submit to Federal or State authority.	Yes.
Section 63.10(d)(3)	Reporting Opacity or VE Observations.	What to report and when	Yes.
Section 63.10(d)(4)	Progress Reports	Must submit progress reports on schedule if under compliance extension.	Yes.
Section 63.10(d)(5)	Startup, Shutdown, and Malfunction Reports.	Contents and submission	Yes.
Section 63.10(e)(1)(2)	Additional continuous monitoring systems Reports.	Must report results for each CEM on a unit; and written copy of performance evaluation; and 3 copies of continuous opacity monitoring system performance evaluation.	Yes.
Section 63.10(e)(3)	Reports	Excess Emission Reports	No.
Section 63.10(e)(3)(i-iii)	Reports	Schedule for reporting excess emissions and parameter monitor exceedance (now defined as deviations).	No.
Section 63.10(e)(3)(iv-v)	Excess Emissions Reports	Requirement to revert to quarterly submission if there is an excess emissions and parameter monitor exceedance (now defined as deviations); and provision to request semiannual reporting after compliance for one year; and submit report by 30th day following end of quarter or calendar half; and if there has not been an exceedance or excess emission (now defined as deviations), report contents is a statement that there have been no deviations.	No.
Section 63.10(e)(3)(iv-v)	Excess Emissions Reports	Must submit report containing all of the information in Section 63.10(c)(5-13), Section 63.8(c)(7-8).	No.
Section 63.10(e)(3)(vi-viii)	Excess Emissions Report and Summary Report.	Requirements for reporting excess emissions for continuous monitoring systems (now called deviations); Requires all of the information in Section 63.10(c)(5-13), Section 63.8(c)(7-8).	No.
Section 63.10(e)(4)	Reporting continuous opacity monitoring system data.	Must submit continuous opacity monitoring system data with performance test data.	Yes.
Section 63.10(f)	Waiver for Recordkeeping/Reporting.	Procedures for Administrator to waive.	Yes.
Section 63.11	Flares	Requirements for flares	No.
Section 63.12	Delegation	State authority to enforce standards.	Yes.
Section 63.13	Addresses	Addresses where reports,	Yes.

Section 63.14.....	Incorporation by Reference	notifications, and requests are sent. Test methods incorporated by reference.	Yes.
Section 63.15.....	Availability of Information.	Public and confidential Information.	Yes.

Appendix A to Subpart DDDDD - Methodology and Criteria for Demonstrating Eligibility for the Health-Based Compliance Alternatives Specified for the Large Solid Fuel Subcategory

1. Purpose/Introduction

This appendix provides the methodology and criteria for demonstrating that your affected source is eligible for the compliance alternative for the HCl emission limit and/or the total selected metals (TSM) emission limit. This appendix specifies emissions testing methods that you must use to determine HCl, chlorine, and manganese emissions from the affected units and what parts of the affected source facility must be included in the eligibility demonstration. You must demonstrate that your affected source is eligible for the health-based compliance alternatives using either a look-up table analysis (based on the look-up tables included in this appendix) or a site-specific compliance demonstration performed according to the criteria specified in this appendix. This appendix also specifies how and when you file any eligibility demonstrations for your affected source and how to show that your affected source remains eligible for the health-based compliance alternatives in the future.

2. Who Is Eligible To Demonstrate That They Qualify for the Health-Based Compliance Alternatives?

Each new, reconstructed, or existing affected source may demonstrate that they are eligible for the health-based compliance alternatives. Section 63.7490 of subpart DDDDD defines the affected source and explains which affected sources are new, existing, or reconstructed.

3. What Parts of My Facility Have To Be Included in the Health-Based Eligibility Demonstration?

If you are attempting to determine your eligibility for the compliance alternative for HCl, you must include every emission point subject to subpart DDDDD that emits either HCl or Cl₂ in the eligibility demonstration.

If you are attempting to determine your eligibility for the compliance alternative for TSM, you must include every emission point subject to subpart DDDDD that emits manganese in the eligibility demonstration.

4. How Do I Determine HAP Emissions From My Affected Source?

(a) You must conduct HAP emissions tests or fuel analysis for every emission point covered under subpart DDDDD within the affected source facility according to the requirements in paragraphs (b) through (f) of this section and the methods

specified in Table 1 of this appendix.

(1) If you are attempting to determine your eligibility for the compliance alternative for HCl, you must test the subpart DDDDD units at your facility for both HCl and Cl₂. When conducting fuel analysis, you must assume any chlorine detected will be emitted as Cl₂.

(2) If you are attempting to determine your eligibility for the compliance alternative for TSM, you must test the subpart DDDDD units at your facility for manganese.

(b) *Periods when emissions tests must be conducted.*

(1) You must not conduct emissions tests during periods of startup, shutdown, or malfunction, as specified in Section 63.7(e)(1).

(2) You must test under worst-case operating conditions as defined in this appendix. You must describe your worst-case operating conditions in your performance test report for the process and control systems (if applicable) and explain why the conditions are worst-case.

(c) *Number of test runs.* You must conduct three separate test runs for each test required in this section, as specified in Section 63.7(e)(3). Each test run must last at least 1 hour.

(d) *Sampling locations.* Sampling sites must be located at the outlet of the control device and prior to any releases to the atmosphere.

(e) *Collection of monitoring data for HAP control devices.* During the emissions test, you must collect operating parameter monitoring system data at least every 15 minutes during the entire emissions test and establish the site-specific operating requirements in Tables 3 or 4, as appropriate, of subpart DDDDD using data from the monitoring system and the procedures specified in Section 63.7530 of subpart DDDDD.

(f) *Nondetect data.* You may treat emissions of an individual HAP as zero if all of the test runs result in a nondetect measurement and the condition in paragraph (f)(1) of this section is met for the manganese test method. Otherwise, nondetect data for individual HAP must be treated as one-half of the method detection limit.

(1) For manganese measured using Method 29 in appendix A to 40 CFR part 60, you analyze samples using atomic absorption spectroscopy (AAS).

(g) You must determine the maximum hourly emission rate for each appropriate emission point according to Equation 1 of this appendix.



Where:

Max Hourly Emissions = Maximum hourly emissions for hydrogen chloride, chlorine, or manganese, in units of pounds per hour.

Er = Emission rate (the 3-run average as determined according to Table 1 of this appendix or the pollutant concentration in the fuel samples analyzed according to Section 63.7521) for hydrogen chloride, chlorine, or manganese, in units of pounds per million Btu of heat input.

Hm = Maximum rated heat input capacity of appropriate emission point, in units of million Btu per hour.

5. What Are the Criteria for Determining If My Facility Is Eligible for the Health-Based Compliance Alternatives?

(a) Determine the HAP emissions from each appropriate emission point within the affected source facility using the procedures specified in section 4 of this appendix.

(b) Demonstrate that your facility is eligible for either of the health-based compliance alternatives using either the methods described in section 6 of this appendix (look-up table analysis) or section 7 of this appendix (site-specific compliance demonstration).

(c) Your facility is eligible for the health-based compliance alternative for HCl if one of the following two statements is true:

(1) The calculated HCl-equivalent emission rate is below the appropriate value in the look-up table;

(2) Your site-specific compliance demonstration indicates that your maximum HI for HCl and C₁₂ at a location where people live is less than or equal to 1.0;

(d) Your facility is eligible for the health-based compliance alternative for TSM if one of the following two statements is true:

(1) The manganese emission rate for all your subpart DDDDD sources is below the appropriate value in the look-up table;

(2) Your site-specific compliance demonstration indicates that your maximum HQ for manganese at a location where people live is less than or equal to 1.0.

6. How Do I Conduct a Look-Up Table Analysis?

You may use look-up tables to demonstrate that your facility is eligible for either the compliance alternative for the HCl emission limit or the compliance alternative for TSM emission limit.

(a) *HCl health-based compliance alternative.* (1) To calculate the total toxicity-

weighted HCl-equivalent emission rate for your facility, first calculate the total affected source emission rate of HCl by summing the maximum hourly HCl emission rates from all your subpart DDDDD sources. Then, similarly, calculate the total affected source emission rate for Cl₂. Finally, calculate the toxicity-weighted emission rate (expressed in HCl equivalents) according to Equation 2 of this appendix.



Where:

ER_{tw} is the HCl-equivalent emission rate, lb/hr.

ER_i is the emission rate of HAP i in lbs/hr

RfC_i is the reference concentration of HAP i

RfC_{HCl} is the reference concentration of HCl ($RfCs$ for HCl and Cl₂ can be found at <http://www.epa.gov/ttn/atw/toxsource/summary.html>).

(2) The calculated HCl-equivalent emission rate will then be compared to the appropriate allowable emission rate in Table 2 of this appendix. To determine the correct value from the table, an average value for the appropriate subpart DDDDD emission points should be used for stack height and the minimum distance between any appropriate subpart DDDDD stack at the facility and the property boundary should be used for property boundary distance. Appropriate emission points and stacks are those that emit HCl and/or Cl₂. If one or both of these values does not match the exact values in the lookup tables, then use the next lowest table value. (Note: If your average stack height is less than 5 meters, you must use the 5 meter row.) Your facility is eligible to comply with the health-based alternative HCl emission limit if your toxicity-weighted HCl equivalent emission rate, determined using the methods specified in this appendix, does not exceed the appropriate value in Table 2 of this appendix.

(b) *TSM Compliance Alternative*. To calculate the total manganese emission rate for your affected source, sum the maximum hourly manganese emission rates for all your subpart DDDDD sources. The calculated manganese emission rate will then be compared to the allowable emission rate in the Table 3 of this appendix. To determine the correct value from the table, an average value for the appropriate subpart DDDDD emission points should be used for stack height and the minimum distance between any appropriate subpart DDDDD stack at the facility and the property boundary should be used for property boundary distance. Appropriate emission points and stacks are those that emit manganese. If one or both of these values does not match the exact values in the lookup tables, then

use the next lowest table value. (Note: If your average stack height is less than 5 meters, you must use the 5 meter row.) Your facility may exclude manganese when demonstrating compliance with the TSM emission limit if your manganese emission rate, determined using the methods specified in this appendix, does not exceed the appropriate value specified in Table 3 of this appendix.

7. How Do I Conduct a Site-Specific Compliance Demonstration?

If you fail to demonstrate that your facility is able to comply with one or both of the alternative health-based emission standards using the look-up table approach, you may choose to perform a site-specific compliance demonstration for your facility. You may use any scientifically-accepted peer-reviewed risk assessment methodology for your site-specific compliance demonstration. An example of one approach for performing a site-specific compliance demonstration for air toxics can be found in the EPA's "Air Toxics Risk Assessment Reference Library, Volume 2, Site-Specific Risk Assessment Technical Resource Document", which may be obtained through the EPA's Air Toxics Web site at http://www.epa.gov/ttn/fera/risk_atoxic.html.

(a) Your facility is eligible for the HCl alternative compliance option if your site-specific compliance demonstration shows that the maximum HI for HCl and Cl₂ from your subpart DDDDD sources is less than or equal to 1.0.

(b) Your facility is eligible for the TSM alternative compliance option if your site-specific compliance demonstration shows that the maximum HQ for manganese from your subpart DDDDD sources is less than or equal to 1.0.

(c) At a minimum, your site-specific compliance demonstration must:

(1) Estimate long-term inhalation exposures through the estimation of annual or multi-year average ambient concentrations;

(2) Estimate the inhalation exposure for the individual most exposed to the facility's emissions;

(3) Use site-specific, quality-assured data wherever possible;

(4) Use health-protective default assumptions wherever site-specific data are not available, and;

(5) Contain adequate documentation of the data and methods used for the assessment so that it is transparent and can be reproduced by an experienced risk assessor and emissions measurement expert.

(d) Your site-specific compliance demonstration need not:

(1) Assume any attenuation of exposure concentrations due to the penetration of outdoor pollutants into indoor exposure areas;

(2) Assume any reaction or deposition of the emitted pollutants during transport

from the emission point to the point of exposure.

8. What Must My Health-Based Eligibility Demonstration Contain?

(a) Your health-based eligibility demonstration must contain, at a minimum, the information specified in paragraphs (a)(1) through (6) of this section.

(1) Identification of each appropriate emission point at the affected source facility, including the maximum rated capacity of each appropriate emission point.

(2) Stack parameters for each appropriate emission point including, but not limited to, the parameters listed in paragraphs (a)(2)(i) through (iv) below:

(i) Emission release type.

(ii) Stack height, stack area, stack gas temperature, and stack gas exit velocity.

(iii) Plot plan showing all emission points, nearby residences, and fenceline.

(iv) Identification of any control devices used to reduce emissions from each appropriate emission point.

(3) Emission test reports for each pollutant and appropriate emission point which has been tested using the test methods specified in Table 1 of this appendix, including a description of the process parameters identified as being worst case. Fuel analyses for each fuel and emission point which has been conducted including collection and analytical methods used.

(4) Identification of the RfC values used in your look-up table analysis or site-specific compliance demonstration.

(5) Calculations used to determine the HCl-equivalent or manganese emission rates according to sections 6(a) or (b) of this appendix.

(6) Identification of the controlling process factors (including, but not limited to, fuel type, heat input rate, type of control devices, process parameters reflecting the emissions rates used for your eligibility demonstration) that will become Federally enforceable permit conditions used to show that your facility remains eligible for the health-based compliance alternatives.

(b) If you use the look-up table analysis in section 6 of this appendix to demonstrate that your facility is eligible for either health-based compliance alternative, your eligibility demonstration must contain, at a minimum, the information in paragraphs (a) and (b)(1) through (3) of this section.

(1) Calculations used to determine the average stack height of the subpart DDDDD emission points that emit either manganese or HCl and Cl₂.

(2) Identification of the subpart DDDDD emission point, that emits either manganese or HCl and Cl₂, with the minimum distance to the property boundary of the facility.

(3) Comparison of the values in the look-up tables (Tables 2 and 3 of this appendix) to your maximum HCl-equivalent or manganese emission rates.

(c) If you use a site-specific compliance demonstration as described in section 7 of this appendix to demonstrate that your facility is eligible, your eligibility demonstration must contain, at a minimum, the information in paragraphs (a) and (c)(1) through (7) of this section:

(1) Identification of the risk assessment methodology used.

(2) Documentation of the fate and transport model used.

(3) Documentation of the fate and transport model inputs, including the information described in paragraphs (a)(1) through (5) of this section converted to the dimensions required for the model and all of the following that apply: meteorological data; building, land use, and terrain data; receptor locations and population data; and other facility-specific parameters input into the model.

(4) Documentation of the fate and transport model outputs.

(5) Documentation of any exposure assessment and risk characterization calculations.

(6) Comparison of the HQ HI to the limit of 1.0.

9. When Do I Have to Complete and Submit My Health-Based Eligibility Demonstration?

(a) If you have an existing affected source, you must complete and submit your eligibility demonstration to your permitting authority, along with a signed certification that the demonstration is an accurate depiction of your facility, no later than the date one year prior to the compliance date of subpart DDDDD. A separate copy of the eligibility demonstration must be submitted to: U.S. EPA, Risk and Exposure Assessment Group, Emission Standards Division (C404-01), Attn: Group Leader, Research Triangle Park, North Carolina 27711, electronic mail address *REAG@epa.gov*.

(b) If you have a new or reconstructed affected source that starts up before the effective date of subpart DDDDD, or an affected source that is an area source that increases its emissions or its potential to emit such that it becomes a major source of HAP before the effective date of subpart DDDDD, then you must comply with the requirements of subpart DDDDD until your eligibility demonstration is completed and submitted to your permitting authority.

(c) If you have a new or reconstructed affected source that starts up after the effective date of subpart DDDDD, or an affected source that is an area source that increases its emissions or its potential to emit such that it becomes a major source of HAP after the effective date for subpart DDDDD, then you must follow the schedule in paragraphs (c)(1) and (2) of this section.

(1) You must complete and submit a preliminary eligibility demonstration based on the information (e.g., equipment types, estimated emission rates, etc.) used to obtain your title V permit. You must base your preliminary eligibility demonstration on the maximum emissions allowed under your title V permit. If the preliminary eligibility demonstration indicates that your affected source facility is eligible for either compliance alternative, then you may start up your new affected source and your new affected source will be considered in compliance with the alternative HCl standard and subject to the compliance requirements in this appendix or, in the case of manganese, your compliance demonstration with the TSM emission limit is based on 7 metals (excluding manganese).

(2) You must conduct the emission tests or fuel analysis specified in section 4 of this appendix upon initial startup and use the results of these emissions tests to complete and submit your eligibility demonstration within 180 days following your initial startup date. To be eligible, you must meet the criteria in section 11 of this appendix within 18 months following initial startup of your affected source.

10. When Do I Become Eligible for the Health-Based Compliance Alternatives?

To be eligible for either health-based compliance alternative, the parameters that defined your affected source as eligible for the health-based compliance alternatives (including, but not limited to, fuel type, fuel mix (annual average), type of control devices, process parameters reflecting the emissions rates used for your eligibility demonstration) must be submitted for incorporation as Federally enforceable limits into your title V permit. If you do not meet these criteria, then your affected source is subject to the applicable emission limits, operating limits, and work practice standards in Subpart DDDDD.

11. How Do I Ensure That My Facility Remains Eligible for the Health-Based Compliance Alternatives?

(a) You must update your eligibility demonstration and resubmit it each time you have a process change, such that any of the parameters that defined your affected source changes in a way that could result in increased HAP emissions (including, but not limited to, fuel type, fuel mix (annual average), change in type of control device, changes in process parameters documented as worst-case conditions during the emissions testing used for your approved eligibility demonstration).

(b) If you are updating your eligibility demonstration to account for an action in paragraph (a) of this section, then you must perform emission testing or fuel analysis according to section 4 of this appendix for the subpart DDDDD emission points that may have increased HAP emissions beyond the levels reflected in your previously approved eligibility demonstration due to the process change. You must submit your revised eligibility demonstration to the permitting authority prior to revising your permit to incorporate the process change. If your updated eligibility demonstration indicates that your affected source is no longer eligible for the health-based compliance alternatives, then you must comply with the applicable emission limits, operating limits, and compliance requirements in Subpart DDDDD.

prior to making the process change and revising your permit.

12. What Records Must I Keep?

You must keep records of the information used in developing the eligibility demonstration for your affected source, including all of the information specified in section 8 of this appendix.

13. Definitions

The definitions in Section 63.7575 of subpart DDDDD apply to this appendix. Additional definitions applicable for this appendix are as follows:

Hazard Index (HI) means the sum of more than one hazard quotient for multiple substances and/or multiple exposure pathways.

Hazard Quotient (HQ) means the ratio of the predicted media concentration of a pollutant to the media concentration at which no adverse effects are expected. For inhalation exposures, the HQ is calculated as the air concentration divided by the RfC.

Look-up table analysis means a risk screening analysis based on comparing the HAP or HAP-equivalent emission rate from the affected source to the appropriate maximum allowable HAP or HAP-equivalent emission rates specified in Tables 2 and 3 of this appendix.

Reference Concentration (RfC) means an estimate (with uncertainty spanning perhaps an order of magnitude) of a continuous inhalation exposure to the human population (including sensitive subgroups) that is likely to be without an appreciable risk of deleterious effects during a lifetime. It can be derived from various types of human or animal data, with uncertainty factors generally applied to reflect limitations of the data used.

Worst-case operating conditions means operation of an affected unit during emissions testing under the conditions that result in the highest HAP emissions or that result in the emissions stream composition (including HAP and non-HAP) that is most challenging for the control device if a control device is used. For example, worst-case conditions could include operation of an affected unit firing solid fuel likely to produce the most HAP.

Table 1 to Appendix B of Subpart DDDDD_Emission Test Methods

For . . .	You must . . .	Using . . .
(1) Each subpart DDDDD emission point for which you choose to use a compliance alternative.	Select sampling ports' location and the number of traverse points.	Method 1 of 40 CFR part 60, appendix A.
(2) Each subpart DDDDD emission point for which you choose to use a compliance alternative.	Determine velocity and volumetric flow rate;.	Method 2, 2F, or 2G in appendix A to 40 CFR part 60.
(3) Each subpart DDDDD emission point for which you choose to use a compliance alternative.	Conduct gas molecular weight analysis.	Method 3A or 3B in appendix A to 40 CFR part 60.

- | | | |
|---|---|--|
| (4) Each subpart DDDDD emission point for which you choose to use a compliance alternative. | Measure moisture content of the stack gas. | Method 4 in appendix A to 40 CFR part 60. |
| (5) Each subpart DDDDD emission point for which you choose to use the HCl compliance alternative. | Measure the hydrogen chloride and chlorine emission concentrations. | Method 26 or 26A in appendix A to 40 CFR part 60. |
| (6) Each subpart DDDDD emission point for which you choose to use the TSM compliance alternative. | Measure the manganese emission concentration. | Method 29 in appendix A to 40 CFR part 60. |
| (7) Each subpart DDDDD emission point for which you choose to use a compliance alternative. | Convert emissions concentration to lb per MMBTU emission rates. | Method 19 F-factor methodology in appendix A to part 60 of this chapter. |

Table 2 to Appendix A of Subpart DDDDD Allowable Toxicity-Weighted Emission Rate Expressed in HCl Equivalents (lbs/hr)

Stack ht. (m)	Distance to property boundary (m)											
	1500	2000	3000	5000	0	50	100	150	200	250	500	1000
5.....					114.9	114.9	114.9	114.9	114.9	114.9	144.3	287.3
	373.0	373.0	373.0	373.0								
10.....					188.5	188.5	188.5	188.5	188.5	188.5	195.3	328.0
	432.5	432.5	432.5	432.5								
20.....					386.1	386.1	386.1	386.1	386.1	386.1	386.1	425.4
	580.0	602.7	602.7	602.7								
30.....					396.1	396.1	396.1	396.1	396.1	396.1	396.1	436.3
	596.2	690.6	807.8	816.5								
40.....					408.1	408.1	408.1	408.1	408.1	408.1	408.1	448.2
	613.3	715.5	832.2	966.0								
50.....					421.4	421.4	421.4	421.4	421.4	421.4	421.4	460.6
	631.0	746.3	858.2	1002.8								
60.....					435.5	435.5	435.5	435.5	435.5	435.5	435.5	473.4
	649.0	778.6	885.0	1043.4								
70.....					450.2	450.2	450.2	450.2	450.2	450.2	450.2	486.6
	667.4	813.8	912.4	1087.4								
80.....					465.5	465.5	465.5	465.5	465.5	465.5	465.5	500.0
	685.9	849.8	940.9	1134.8								
100.....					497.5	497.5	497.5	497.5	497.5	497.5	497.5	527.4
	723.6	917.1	1001.2	1241.3								
200.....					677.3	677.3	677.3	677.3	677.3	677.3	677.3	682.3
	919.8	1167.1	1390.4	1924.6								

Table 3 to Appendix A of Subpart DDDDD Allowable Manganese Emission Rate (lbs/hr)

Stack ht. (m)	Distance to property boundary (m)											
	1500	2000	3000	5000	0	50	100	150	200	250	500	1000
5.....					0.29	0.29	0.29	0.29	0.29	0.29	0.36	0.72
	0.93	0.93	0.93	0.94								
10.....					0.47	0.47	0.47	0.47	0.47	0.47	0.49	0.82
	1.08	1.08	1.08	1.08								

20.....	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	1.06
1.45 1.51 1.51 1.51									
30.....	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	1.09
1.49 1.72 2.02 2.04									
40.....	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.12
1.53 1.79 2.08 2.42									
50.....	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.15
1.58 1.87 2.15 2.51									
60.....	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.18
1.62 1.95 2.21 2.61									
70.....	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.22
1.67 2.03 2.28 2.72									
80.....	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.25
1.71 2.12 2.35 2.84									
100.....	1.24	1.24	1.24	1.24	1.24	1.24	1.24	1.24	1.32
1.81 2.29 2.50 3.10									
200.....	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.71
2.30 2.92 3.48 4.81									

B. State Only Enforceable Permit To Install Facility Specific Terms and Conditions

None.

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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
B002 - No. 7 coal boiler. Wet bottom, pulverized coal-fired boiler (C.E. model VU-405) having a maximum heat input capacity of 422 MMBTU/hr, capable of running on No. 2 fuel oil as backup fuel, and is a backup control device for Non-Condensable Gases (NCGs). The unit is controlled with a cyclone/multiclone and an ESP.	OAC rule 3745-31-05(A)(3)	See section A.II.2. below.
	OAC rule 3745-17-07(A)	Visible particulate emissions from the stack serving B002 and B003 shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-10(C)(1)	0.10 lb of particulate emissions per MMBTU of actual heat input, when firing coal.
	OAC rule 3745-17-10(B)(1)	0.020 lb of particulate emissions per MMBTU of actual heat input, when firing #2 fuel oil.
	OAC rule 3745-18-77(B)(1)	9.9 lbs of sulfur dioxide per MMBTU actual heat input.
	OAC Chapter 3745-14	See section A.I.2.a below.

2. Additional Terms and Conditions

- 2.a Refer to Part II. A.1. - Facility Specific Terms and Conditions of the permit for the requirements of OAC Chapter 3745-14 "NOx Budget Trading Program in Ohio."

II. Operational Restrictions

1. The quality of the oil burned in this emissions unit shall meet a sulfur content that is sufficient to comply with the allowable sulfur dioxide emission limitation specified in section A.I.1 above.
2. This emissions unit shall not be taken out of service at the same time, as both emissions units B003(No.8 Coal Boiler) and B013 (Wood Waste Boiler), except during emergency outages. B013 shall serve as the primary incineration point for High-Volume Low Concentration (HVLC) Non-Condensable Gases (NCGs), Low-Volume High Concentration (LVHC) NCG's and Stripper Off-Gases (SOG's). Either B002 or B003 shall serve as back-up control devices for NCG combustion.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall operate and maintain equipment to continuously monitor and record the opacity of the visible particulate emissions from the combined emissions from units B002 and B003. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13.

The continuous monitoring system consists of all the equipment used to acquire data and includes the data recording/processing hardware and software.

The permittee shall maintain a letter of certification from Ohio EPA documenting that the continuous opacity monitoring system has been certified in accordance with the requirements of 40 CFR Part 60, Appendix B, Performance Specification 1. The letter of certification shall be made available to the Ohio EPA Southeast District Office upon request.

The permittee shall maintain records of the following data obtained by the continuous opacity monitoring system: percent opacity on a 6-minute block average basis, results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.

2. The permittee shall maintain a written quality assurance/quality control plan for the continuous opacity monitoring system designed to ensure continuous valid and representative readings of opacity. The plan shall include, as a minimum, conducting and recording daily automatic zero/span checks, provisions for conducting a quarterly audit of the continuous opacity monitoring system, and a description of preventive maintenance activities. The quality assurance/quality control plan must be kept on site and available for inspection during regular office hours.
3. To obtain an exemption pursuant to OAC rule 3745-17-07(A)(3)(a)(i) or (A)(3)(b)(i), the permittee shall operate and maintain a temperature monitor and recorder that measures and records the temperature of the boiler exhaust gases entering the ESP during (a) all periods of start-up until the ESP is operational or until the inlet temperature of the ESP achieves the temperature level specified in OAC rule 3745-17-07(A)(3)(a)(i) and (b) all periods of shutdown until the inlet temperature of the ESP drops below the temperature

level specified in OAC rule 3745-17-07(A)(3)(b)(i). An electronic or hardcopy record of the temperatures during periods of start-up and shutdown shall be maintained.

The temperature monitor and recorder shall be installed, calibrated, operated, and maintained in accordance with manufacturer's recommendations, with any modifications deemed necessary by the permittee, and shall be capable of accurately measuring the temperature of the boiler exhaust gases in units of degrees Fahrenheit.

4. The permittee shall maintain monthly records of the total quantity of coal burned, and the results of the analyses for ash content, sulfur content, heat content, and the average sulfur dioxide emission rate (lbs/MMBTU). The coal collection and sampling procedures and analyses for ash content, sulfur content, and heat content shall be performed in accordance with the following:

The permittee shall collect monthly composite samples of the coal burned in this emissions unit. A sufficient number of individual samples shall be collected so that each composite sample is representative of the average quality of coal burned in this emissions unit during each calendar month. The coal sampling shall be performed in accordance with the most recent version of ASTM method D2234, Collection of a Gross Sample of Coal.

Each monthly composite sample of coal shall be analyzed for ash content (percent), sulfur content (percent), and heat content (Btu/pound). The analytical methods for ash content, sulfur content and heat content shall be the most recent version of: ASTM method D3174, Ash in the Analysis of Coal and Coke; ASTM method D3177, Total Sulfur in the Analysis Sample of Coal and Coke or ASTM method D4239, Sulfur in the Analysis Sample of Coal and Coke Using High Temperature Tube Furnace Combustion Methods; and ASTM method D5865, Gross Calorific Value of Coal and Coke, respectively. Alternative, equivalent methods may be used upon written approval from the Ohio EPA Southeast District Office.

5. The permittee shall comply with the requirements of one of the following alternatives pertaining to the use of #2 fuel oil:

- 5.a Alternative 1:

For each shipment of oil received for burning in this emissions unit, the permittee shall collect or require the oil supplier to collect a representative grab sample of oil and maintain records of the total quantity of oil received, the permittee's or oil supplier's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lbs/MMBTU). The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F). A shipment may be comprised of multiple tank truck loads from the same supplier's batch, and the quality of the oil for those loads may be represented by a single batch analysis from the supplier.

5.b Alternative 2:

The permittee shall collect a representative grab sample of oil that is burned in this emissions unit for each day when the emissions unit is in operation. If additional fuel oil is added to the tank serving this emissions unit on a day when the emissions unit is in operation, the permittee shall collect a sufficient number of grab samples to develop a composite sample representative of the fuel oil burned in this emissions unit. A representative grab sample of oil does not need to be collected on days when this emissions unit is only operated for the purpose of "test-firing." The permittee shall maintain records of the total quantity of oil burned each day, except for the purpose of test-firing, the permittee's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lbs/MMBTU). The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F).

- 5.c The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60, Appendix A, Method 19, or the appropriate ASTM methods (such as, ASTM methods D240 and D4294), or equivalent methods as approved by the Director.

IV. Reporting Requirements

1. The permittee shall submit reports (hardcopy or electronic format) within one month following the end of each calendar quarter to the Ohio EPA Southeast District Office documenting all instances of opacity values in excess of the limitation specified in section A.I.1 of these terms and conditions, detailing the date, commencement and completion times, duration, magnitude (percent opacity), reason (if known), and corrective actions taken (if any) of each 6-minute block average above the applicable opacity limitations.

The reports shall also identify any excursions of the start-up and shutdown provisions specified in OAC rule 3745-17-07(A)(3) and document any continuous opacity monitoring system downtime while the emissions unit was on line (date, time, duration and reason) along with any corrective action taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason, and corrective action taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall be included in the quarterly report.

If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the date, time, reason, and corrective action taken for each time period of monitoring system malfunction. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line also shall be included in the quarterly report.

These quarterly excess emission reports shall be submitted by January 31, April 30, July 31, and October 31 of each year and shall address the data obtained during the previous calendar quarter.

2. The permittee shall submit quarterly deviation (excursion) reports that identify whenever a monthly composite sample collected pursuant to section A.III.4 above indicates a deviation from the allowable sulfur dioxide emission rate. These reports shall be submitted in accordance with section A.1.c.ii of the General Terms and Conditions of this permit.
3. The permittee shall notify the Ohio EPA Southeast District Office in writing of any record which shows a deviation of the allowable sulfur dioxide emission limitation based upon the calculated sulfur dioxide emission rates from section A.III.4 above when firing #2 fuel oil. The notification shall include a copy of such record and shall be sent to the Ohio EPA Southeast District Office. These reports shall be submitted in accordance with section A.1.c.ii of the General Terms and Conditions of this permit.
4. The permittee shall submit deviation (excursion) reports that identify any period of time when B002, B003 and B013 were all offline and the venting of NCG's were uncontrolled. Each report shall be submitted within 30 days after the deviation occurs.

V. Testing Requirements

1. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

- 1.a Emission Limitation:

Visible particulate emissions from the stack serving B002 and B003 shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, compliance with this emission limitation shall be demonstrated through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

- 1.b Emission Limitation:

0.10 lb of particulate emissions per MMBTU of actual heat input, when firing coal

Applicable Compliance Method:

If required, compliance with this emission limitation shall be demonstrated through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(9).

1.c Emission Limitation:

0.020 lb of particulate emissions per MMBTU of actual heat input, when firing #2 fuel oil

Applicable Compliance Method:

Compliance with this emission limitation may be determined by multiplying an emission factor of 2.0 lbs of particulates/1000 gallons of fuel oil fired by the emissions unit's maximum hourly fuel oil firing capacity (1584 gallons/hr), dividing by the emissions unit's rated heat input capacity (422 MMBTU/hr) and dividing by 1000. This emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.3, Table 1.3-1 (9/98).

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(9).

1.d Emission Limitation:

9.9 lbs of sulfur dioxide emissions per MMBTU of actual heat input

Applicable Compliance Method:

When firing fuel oil, compliance with the allowable sulfur dioxide emission limitation may be demonstrated by documenting that the sulfur content of each shipment of fuel oil received during the calendar month meets the limitation.

When firing coal, compliance with the allowable sulfur dioxide emission limitation may be demonstrated based upon the records required pursuant to section A.III.4.

If required, the permittee shall demonstrate compliance with the allowable sulfur dioxide emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6 or 6A.

VI. Miscellaneous Requirements

None.

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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
<p>B002 - No. 7 coal boiler. Wet bottom, pulverized coal-fired boiler (C.E. model VU-405) having a maximum heat input capacity of 422 MMBTU/hr, capable of running on No. 2 fuel oil as backup fuel, and is a backup control device for Non-Condensable Gases (NCGs). The unit is controlled with a cyclone/multiclone and an ESP.</p>		

2. Additional Terms and Conditions

2.a

II. Operational Restrictions

None.

III. Monitoring and/or Recordkeeping Requirements

None.

IV. Reporting Requirements

None.

V. Testing Requirements

None.

VI. Miscellaneous Requirements

None.

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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
B003 - No. 8 coal boiler. Wet bottom, pulverized coal-fired boiler (C.E. Model VU-40) having a maximum heat input capacity of 505 MMBTU/hr, capable of running on No. 2 fuel oil as backup fuel, and is a backup control device for Non-Condensable Gases (NCGs). The unit is controlled with a cyclone/multiclone and an ESP.	OAC rule 3745-31-05(A)(3)	See section A.II.2. below.
	OAC rule 3745-17-07(A)	Visible particulate emissions from the stack serving B002 and B003 shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-10(C)(1)	0.10 lb of particulate emissions per MMBTU of actual heat input, when firing coal.
	OAC rule 3745-17-10(B)(1)	0.020 lb of particulate emissions per MMBTU of actual heat input, when firing #2 fuel oil.
	OAC rule 3745-18-77(B)(1)	9.9 lbs of sulfur dioxide per MMBTU actual heat input.
	OAC Chapter 3745-14	See section A.I.2.a below.

2. Additional Terms and Conditions

- 2.a Refer to Part II. A.1. - Facility Specific Terms and Conditions of the permit for the requirements of OAC Chapter 3745-14 "NOx Budget Trading Program in Ohio."

II. Operational Restrictions

1. The quality of the oil burned in this emissions unit shall meet a sulfur content that is sufficient to comply with the allowable sulfur dioxide emission limitation specified in section A.I.1 above.

2. This emissions unit shall not be taken out of service at the same time, as both emissions units B002(No.7 Coal Boiler) and B013 (Wood Waste Boiler), except during emergency outages. B013 shall serve as the primary incineration point for High-Volume Low Concentration (HVLC) Non-Condensable Gases (NCGs), Low-Volume High Concentration (LVHC) NCG's and Stripper Off-Gases (SOG's). Either B002 or B003 shall serve as back-up control devices for NCG combustion.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall operate and maintain equipment to continuously monitor and record the opacity of the visible particulate emissions from the combined emissions from units B002 and B003. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13.

The continuous monitoring system consists of all the equipment used to acquire data and includes the data recording/processing hardware and software.

The permittee shall maintain a letter of certification from Ohio EPA documenting that the continuous opacity monitoring system has been certified in accordance with the requirements of 40 CFR Part 60, Appendix B, Performance Specification 1. The letter of certification shall be made available to the Ohio EPA Southeast District Office upon request.

The permittee shall maintain records of the following data obtained by the continuous opacity monitoring system: percent opacity on a 6-minute block average basis, results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.

2. The permittee shall maintain a written quality assurance/quality control plan for the continuous opacity monitoring system designed to ensure continuous valid and representative readings of opacity. The plan shall include, as a minimum, conducting and recording daily automatic zero/span checks, provisions for conducting a quarterly audit of the continuous opacity monitoring system, and a description of preventive maintenance activities. The quality assurance/quality control plan must be kept on site and available for inspection during regular office hours.
3. To obtain an exemption pursuant to OAC rule 3745-17-07(A)(3)(a)(i) or (A)(3)(b)(i), the permittee shall operate and maintain a temperature monitor and recorder that measures and records the temperature of the boiler exhaust gases entering the ESP during (a) all periods of start-up until the ESP is operational or until the inlet temperature of the ESP achieves the temperature level specified in OAC rule 3745-17-07(A)(3)(a)(i) and (b) all periods of shutdown until the inlet temperature of the ESP drops below the temperature level specified in OAC rule 3745-17-07(A)(3)(b)(i). An electronic or hardcopy record of the temperatures during periods of start-up and shutdown shall be maintained.

The temperature monitor and recorder shall be installed, calibrated, operated, and maintained in accordance with manufacturer's recommendations, with any modifications

deemed necessary by the permittee, and shall be capable of accurately measuring the temperature of the boiler exhaust gases in units of degrees Fahrenheit.

4. The permittee shall maintain monthly records of the total quantity of coal burned, and the results of the analyses for ash content, sulfur content, heat content, and the average sulfur dioxide emission rate (lbs/MMBTU). The coal collection and sampling procedures and analyses for ash content, sulfur content, and heat content shall be performed in accordance with the following:

The permittee shall collect monthly composite samples of the coal burned in this emissions unit. A sufficient number of individual samples shall be collected so that each composite sample is representative of the average quality of coal burned in this emissions unit during each calendar month. The coal sampling shall be performed in accordance with the most recent version of ASTM method D2234, Collection of a Gross Sample of Coal.

Each monthly composite sample of coal shall be analyzed for ash content (percent), sulfur content (percent), and heat content (Btu/pound). The analytical methods for ash content, sulfur content and heat content shall be the most recent version of: ASTM method D3174, Ash in the Analysis of Coal and Coke; ASTM method D3177, Total Sulfur in the Analysis Sample of Coal and Coke or ASTM method D4239, Sulfur in the Analysis Sample of Coal and Coke Using High Temperature Tube Furnace Combustion Methods; and ASTM method D5865, Gross Calorific Value of Coal and Coke, respectively. Alternative, equivalent methods may be used upon written approval from the Ohio EPA Southeast District Office.

5. The permittee shall comply with the requirements of one of the following alternatives pertaining to the use of #2 fuel oil:

5.a Alternative 1:

For each shipment of oil received for burning in this emissions unit, the permittee shall collect or require the oil supplier to collect a representative grab sample of oil and maintain records of the total quantity of oil received, the permittee's or oil supplier's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lbs/MMBTU). The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F). A shipment may be comprised of multiple tank truck loads from the same supplier's batch, and the quality of the oil for those loads may be represented by a single batch analysis from the supplier.

5.b Alternative 2:

The permittee shall collect a representative grab sample of oil that is burned in this emissions unit for each day when the emissions unit is in operation. If additional fuel oil is added to the tank serving this emissions unit on a day when the emissions unit is in operation, the permittee shall collect a sufficient number of grab samples to develop a composite sample representative of the fuel oil burned in this emissions unit. A

representative grab sample of oil does not need to be collected on days when this emissions unit is only operated for the purpose of "test-firing." The permittee shall maintain records of the total quantity of oil burned each day, except for the purpose of test-firing, the permittee's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lbs/MMBTU). The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F).

- 5.c The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60, Appendix A, Method 19, or the appropriate ASTM methods (such as, ASTM methods D240 and D4294), or equivalent methods as approved by the Director.

IV. Reporting Requirements

1. The permittee shall submit reports (hardcopy or electronic format) within one month following the end of each calendar quarter to the Ohio EPA Southeast District Office documenting all instances of opacity values in excess of the limitation specified in section A.I.1 of these terms and conditions, detailing the date, commencement and completion times, duration, magnitude (percent opacity), reason (if known), and corrective actions taken (if any) of each 6-minute block average above the applicable opacity limitations.

The reports shall also identify any excursions of the start-up and shutdown provisions specified in OAC rule 3745-17-07(A)(3) and document any continuous opacity monitoring system downtime while the emissions unit was on line (date, time, duration and reason) along with any corrective action taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason, and corrective action taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall be included in the quarterly report.

If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the date, time, reason, and corrective action taken for each time period of monitoring system malfunction. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line also shall be included in the quarterly report.

These quarterly excess emission reports shall be submitted by January 31, April 30, July 31, and October 31 of each year and shall address the data obtained during the previous calendar quarter.

2. The permittee shall submit quarterly deviation (excursion) reports that identify whenever a monthly composite sample collected pursuant to section A.III.4 above indicates a deviation from the allowable sulfur dioxide emission rate. These reports shall be submitted in accordance with section A.1.c.ii of the General Terms and Conditions of this permit.

3. The permittee shall notify the Ohio EPA Southeast District Office in writing of any record which shows a deviation of the allowable sulfur dioxide emission limitation based upon the calculated sulfur dioxide emission rates from section A.III.4 above when firing #2 fuel oil. The notification shall include a copy of such record and shall be sent to the Ohio EPA Southeast District Office. These reports shall be submitted in accordance with section A.1.c.ii of the General Terms and Conditions of this permit.
4. The permittee shall submit deviation (excursion) reports that identify any period of time when B002, B003 and B013 were all offline and the venting of NCG's were uncontrolled. Each report shall be submitted within 30 days after the deviation occurs.

V. Testing Requirements

1. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

- 1.a Emission Limitation:

Visible particulate emissions from the stack serving B002 and B003 shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, compliance with this emission limitation shall be demonstrated through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

- 1.b Emission Limitation:

0.10 lb of particulate emissions per MMBTU of actual heat input, when firing coal

Applicable Compliance Method:

If required, compliance with this emission limitation shall be demonstrated through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(9).

- 1.c Emission Limitation:

0.020 lb of particulate emissions per MMBTU of actual heat input, when firing #2 fuel oil

Applicable Compliance Method:

Compliance with this emission limitation may be determined by multiplying an emission factor of 2.0 lbs of particulates/1000 gallons of fuel oil fired by the emissions unit's

maximum hourly fuel oil firing capacity (3504 gallons/hr), dividing by the emissions unit's rated heat input capacity (505 MMBTU/hr) and dividing by 1000. This emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.3, Table 1.3-1 (9/98).

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(9).

1.d Emission Limitation:

9.9 lbs of sulfur dioxide emissions per MMBTU of actual heat input

Applicable Compliance Method:

When firing fuel oil, compliance with the allowable sulfur dioxide emission limitation may be demonstrated by documenting that the sulfur content of each shipment of fuel oil received during the calendar month meets the limitation.

When firing coal, compliance with the allowable sulfur dioxide emission limitation may be demonstrated based upon the records required pursuant to section A.III.4.

If required, the permittee shall demonstrate compliance with the allowable sulfur dioxide emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6 or 6A.

VI. Miscellaneous Requirements

None.

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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
B003 - No. 8 coal boiler. Wet bottom, pulverized coal-fired boiler (C.E. Model VU-40) having a maximum heat input capacity of 505 MMBTU/hr, capable of running on No. 2 fuel oil as backup fuel, and is a backup control device for Non-Condensable Gases (NCGs). The unit is controlled with a cyclone/multiclone and an ESP.	None	None

2. **Additional Terms and Conditions**

- 2.a None.

II. Operational Restrictions

None.

III. Monitoring and/or Recordkeeping Requirements

None.

IV. Reporting Requirements

None.

V. Testing Requirements

None.

VI. Miscellaneous Requirements

None.

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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
<p>B013 - Modification of the No. 6 Wood Residue Boiler rated at 539 MMBTU/hr, to allow for the burning of Tire Derived Fuel(TDF), NCGs, dewatered sludge, and other milled wood wastes.</p> <p>This permit supersedes PTI# 06-368 that was issued for B013.</p>	<p>OAC rule 3745-31-05(A)(3)</p>	<p>PM10 emissions shall not exceed 0.042 lb/MMBTU of actual heat input, as a 3-hour average.</p> <p>Sulfur dioxide emissions shall not exceed 3.2 lbs/MMBTU of actual heat input, as a 3-hour average.</p> <p>Nitrogen oxide emissions shall not exceed 0.59 lb/MMBTU of actual heat input, as a 3-hour average.</p> <p>Carbon monoxide emissions shall not exceed 0.89 lb/MMBTU of actual heat input, as an 3-hour average.</p> <p>Volatile organic compound emissions shall not exceed 0.051 lb/MMBTU of actual heat input, as a 3-hour average.</p> <p>H2SO4 emissions shall not exceed 0.16 lb/MMBTU of actual heat input, as a 3-hour average.</p> <p>Carbon monoxide emissions during periods of start-up/shutdown shall not exceed 3.75 lbs/MMBTU of actual heat input, as an 8-hour block average.</p>

	Compliance with this rule also includes compliance with OAC rules 3745-17-07(A) and 3745-18-06(D).
OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
OAC rule 3745-18-06(D)	Sulfur dioxide emissions shall not exceed 1.6 lbs/MMBTU of actual heat input, when burning #2 fuel oil in the emissions unit.
OAC rule 3745-17-10(C)(1)	The emission limitation specified in this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
OAC rule 3745-31-05(C)	The tons of emissions per rolling 12-month period shall not exceed: PM10 - 73.6; Sulfur dioxide - 5,606.4; Nitrogen oxide - 1,033.7 Carbon monoxide - 1,559.3; Volatile organic compounds - 89.4; H2SO4 - 280.3.

2. Additional Terms and Conditions

2.a none.

II. Operational Restrictions

1. The maximum annual fuel heat input for this emissions unit shall not exceed 3,504,000 MMBTU, based upon a rolling 12-month summation of heat input values.
2. To ensure enforceability during the first 12 calendar months of operation following the startup of emissions units B013, the permittee shall not exceed the heat input for any given calendar month established by multiplying the value of 400 MMBTU/hr by the hours in that calendar month. Using this methodology results in a maximum allowable heat input for the month of February (28 day month) of 268,800 MMBTU, 288,000 MMBTU for months with 30 days, and 297,600 MMBTU for months with 31 days. This condition will not be required following the first 12 calendar months of operation.

3. This emissions unit shall not be taken out of service at the same time, as both emissions units B002 (No.7 Coal Boiler) and B003 (No. 8 Coal Boiler), except during emergency outages. B013 shall serve as the primary incineration point for High-Volume Low Concentration (HVLC) Non-Condensable Gases (NCGs), Low-Volume High Concentration (LVHC) NCG's and Stripper Off-Gases (SOG's). Either B002 or B003 shall serve as back-up control devices for NCG combustion.
4. The normal operating scenario is to operate the cyclones, wet ESP and the scrubber for particulate control. If the wet ESP is off-line, efforts shall be made to return it to service as expeditiously as possible. When the wet ESP is off-line (Alternate Operating Scenario), the permittee shall restrict the steam flow rate for this emissions unit to 200,000 lbs/hr of steam or less.
5. The minimum pressure drop or pressure drop range across the scrubber, and the minimum scrubber water flow rate shall be determined during the initial performance test that demonstrates that the emissions unit is in compliance. The permittee shall use a 3-hour average to determine compliance with the levels established through the initial performance test. That minimum pressure drop or pressure drop range across the scrubbers and minimum scrubber water flow rate shall be continuously maintained at all times while the emissions unit is in operation.

The operation of the scrubber outside the ranges specified above may or may not indicate a mass emission and/or visible emission violation. If required by the Ohio EPA, Southeast District Office, compliance with the mass emission limitation and visible emission limitation shall be determined by performing concurrent mass emission tests and visible emissions observations using USEPA-approved methods and procedures. The results of any required emission tests and visible emission observations shall be used in determining whether or not the operation of the scrubber outside the range specified above is indicative of a possible violation of the mass emission limitation and/or visible emission limitation and, if appropriate, to reestablish a more representative pressure drop and water flow rate range.

6. The quality of the oil burned in this emissions unit shall meet a sulfur content that is sufficient to comply with the allowable SO₂ emission limitation specified in section A.I.1 above.
 - 6.a The average total combined power input (in kilowatts) to all fields of the wet ESP, for any 3-hour block of time when the emissions unit is in operation, shall be no less than 90 percent of the total combined power input, as a 3-hour average, during the most recent emission tests that demonstrated the emissions unit was in compliance with the particulate emission limitation in section A.I.1.
 - 6.b The minimum number of fields on-line in the wet ESP, for any 3-hour block of time when the emissions unit is in operation, shall be no less than the number of fields on-line during the most recent emission tests that demonstrated the emissions unit was in compliance with the particulate emission limitation in section A.I.1.

- 6.c The operation of the wet ESP outside the ranges specified above may or may not indicate a mass emission and/or visible emission violation. If required by the Ohio EPA, Southeast District Office, compliance with the mass emission limitation and visible emission limitation shall be determined by performing concurrent mass emission tests and visible emissions observations using USEPA-approved methods and procedures. The results of any required emission tests and visible emission observations shall be used in determining whether or not the operation of the wet ESP outside the range specified above is indicative of a possible violation of the mass emission limitation and/or visible emission limitation and, if appropriate, to reestablish a more representative total combined power input and the minimum number of fields on-line during operation.
7. Installation and operation of the emissions units included in this PTI (B002, B003, and B013) is contingent upon the permanent shutdown of the #5 Coal Boiler (B001). The net change in emissions as a result of this equipment shutdown and installation is as follows:

Project Emissions (TPY)	PM10	SO2	NOx	CO	VOC	H2SO ₄	Lead	TRS	Mercury
Net Project Increases B013	33	5588	817	102	39.8	279	0.006	0.2	0.0001
B001 Shutdown	20	7058	781	3	1	353	0.560	0	0.01
Net Change	14	-1470	36	99	na*	-73	na*	na*	na*

As a result of the net change in emissions, the proposed modification of B013 is not a major modification and the permittee has "netted" out of Federal Prevention of Significant Deterioration requirements.

III. Monitoring and/or Recordkeeping Requirements

- The permittee shall continuously monitor and record the steam flow rate from B013. Copies of all supporting steam records shall be maintained for a period of 5 calendar years, and shall be made available to the Director (the Ohio EPA Southeast District Office) upon verbal or written request.
- The permittee shall properly operate and maintain equipment to continuously monitor the pressure drop across the scrubber and the scrubber water flow rate while the emissions unit is in operation. The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

The permittee shall collect and record the following information each day:

- the pressure drop across the scrubber, in inches of water, on a 3-hour average basis;

- b. the scrubber water flow rate, in gallons per minute, on a 3-hour average basis; and
- c. the downtimes for the capture (collection) system, control device, and monitoring equipment when the associated emissions unit was in operation.

If the pressure drop across the scrubber is not maintained at or above the specified level or the scrubber water flow rate is not maintained at or above the specified level, then appropriate corrective actions shall be pursued. The permittee may reestablish these minimum values based upon data collected during the most recent emission tests that demonstrate that the emissions unit was in compliance with the applicable requirements, and any future corrective actions shall take place based upon these revised values.

- 3. The permittee shall properly operate and maintain equipment to continuously monitor and record the number of wet ESP fields on-line and the combined power input through the wet ESP while the emissions unit is in operation. The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

The permittee shall record all time periods when the emissions unit was in operation and the wet ESP was not on-line.

- 4. The permittee shall properly operate and maintain equipment to continuously monitor and record the steam flow rate from this emissions unit when the wet ESP is off-line. The monitoring and recording devices shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

The permittee shall collect and record the average hourly steam flow rate for all time periods when the emissions unit is in operation and the wet ESP is not on-line.

- 5. The permittee shall comply with the requirements of either Alternative 1 or Alternative 2 below pertaining to the use of #2 fuel oil.

5.a Alternative 1:

For each shipment of oil received for burning in this emissions unit, the permittee shall collect or require the oil supplier to collect a representative grab sample of oil and maintain records of the total quantity of oil received, the permittee's or oil supplier's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lbs/MMBTU). (The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F).) A shipment may be comprised of multiple tank truck loads from the same supplier's batch, and the quality of the oil for those loads may be represented by a single batch analysis from the supplier.

5.b Alternative 2:

The permittee shall collect a representative grab sample of oil that is burned in this emissions unit for each day when the emissions unit is in operation. If additional fuel oil is added to the tank serving this emissions unit on a day when the emissions unit is in operation, the permittee shall collect a sufficient number of grab samples to develop a composite sample representative of the fuel oil burned in this emissions unit. A representative grab sample of oil does not need to be collected on days when this emissions unit is only operated for the purpose of "test-firing." The permittee shall maintain records of the total quantity of oil burned each day, except for the purpose of test-firing, the permittee's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lbs/MMBTU). (The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F).)

5.c The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60, Appendix A, Method 19, or the appropriate ASTM methods (such as, ASTM methods D240 and D4294), or equivalent methods as approved by the Director.

6. The permittee shall monitor and record the following information on a monthly basis:

- a. the tons of wood residue that was fed to the boiler that month and the heating value of the wood residue;
- b. the tons of TDF that was fed to the boiler that month and the heating value of the TDF;
- c. the amount of NCG's fed to the boiler and the calculated heating value of NCG's that were burned that month;
- d. the amount of dewatered sludge and waste paper fed to the boiler and calculated heating value of dewatered sludge and waste paper that month;
- e. the tons of milled wood wastes that were fed to the boiler that month and the heating value of the other milled wood wastes; and
- f. the total actual heat input to the emissions unit, calculated as follows:

$$MI = MI_w + MI_t + MI_g + MI_s + MI_o$$

- MI = Total heat input for each day, MMBTU
- MI_w = Monthly heat input rate from Wood Residue (heating value of wood residue * the amount of wood residue fed to the boiler)
- MI_t = Monthly heat input rate from TDF (heating value of TDF * the amount of TDF fed to the boiler)
- MI_g = Monthly heat input rate from NCG's (calculated heating value of NCG * the amount of NCG fed to the boiler)
- MI_s = Monthly heat input rate from dewatered Sludge and waste paper (calculated heating value of dewatered Sludge and waste paper * amount of NCG fed to the boiler)
- MI_o = Monthly heat input rate from other milled wood wastes

The heat content not calculated in the recordkeeping above shall be determined through raw materials sampling and testing, on a monthly basis. The raw materials that are not calculated include TDF, wood residue, and other milled wood wastes. A representative composite sample shall be taken from the raw materials fed into the boiler and appropriate testing performed to determine heat content of these materials in order to fulfill the recordkeeping requirements above. Upon written receipt from Ohio EPA, the sampling and testing frequency of raw materials may be performed quarterly instead of monthly.

7. The permittee shall maintain monthly records of the following information for each this emission unit:
 - a. Beginning after the first 12 calendar months of operation following issuance of this permit, the rolling, 12-month summation of fuel heat input (MMBTU).
 - b. During the first 12 calendar months of operation following issuance of this permit, the permittee shall record the cumulative fuel heat input (MMBTU) for each calendar month.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling, 12-month fuel heat input limitation and, for the first 12 calendar months of operation, all exceedances of the maximum allowable monthly cumulative fuel heat input limitation. These reports are due by the dates described in Part 1 - General Terms and Conditions of this permit under section (A)(2).
2. The permittee shall submit quarterly deviation (excursion) reports that identify the following:
 - a. all periods of time during which the static pressure drop across the scrubber was not maintained at or above the level specified in section A.II when the emissions unit was in operation;
 - b. all periods of time during which the scrubber water flow rate was not maintained at or above the level specified in section A.II when the emissions unit was in operation;
 - c. all periods of time during which the minimum number of wet ESP fields, specified in section A.II, were not in service when the emissions unit was in operation;
 - d. all periods of time during which the combined power input to the wet ESP was not maintained at or above the level specified in section A.II when the emissions unit was in operation;

- e. all periods of time during which the emissions unit was in operation, the wet ESP was off-line, and the emissions unit's steam flow rate exceeded the level specified in section A.II; and
- f. all periods of time during which the capture (collection) systems, control devices, and monitoring systems were not in service when the associated emissions unit was in operation.

These reports are due by the dates described in Part 1 - General Terms and Conditions of this permit under section (A)(2).

- 3. The permittee shall notify the Ohio EPA Southeast District Office in writing of any record which shows a deviation of the allowable SO₂ emission limitation based upon the calculated SO₂ emission rates from section A.III above. The notification shall include a copy of such record and shall be sent to the Ohio EPA Southeast District Office in the next quarterly report.
- 4. The permittee shall submit deviation (excursion) reports that identify any period of time when B002, B003 and B013 were all offline and the venting of NCG's were uncontrolled. Each report shall be submitted within 30 days after the deviation occurs.

V. Testing Requirements

- 1. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

- 1.a Emission Limitation:

PM₁₀ emissions shall not exceed 0.042 lb/MMBTU of actual heat input, as a 3-hour average.

Applicable Compliance Method:

Compliance with the lb/MMBTU emissions limitation shall be demonstrated based upon the applicable emission tests for this emission limitation specified in section A.V.2.

- 1.b Emission Limitation:

Sulfur dioxide emissions shall not exceed 3.2 lbs/MMBTU of actual heat input, as a 3-hour average.

Applicable Compliance Method:

Compliance with the lb/MMBTU emissions limitation shall be demonstrated based upon the applicable emission tests for this emission limitation specified in section A.V.2.

1.c Emission Limitation:

Nitrogen oxide emissions shall not exceed 0.59 lb/MMBTU of actual heat input, as a 3-hour average.

Applicable Compliance Method:

Compliance with the lb/MMBTU emissions limitation shall be demonstrated based upon the applicable emission tests for this emission limitation specified in section A.V.2.

1.d Emission Limitation:

Carbon monoxide emissions shall not exceed 0.89 lb/MMBTU of actual heat input, as a 3-hour average.

Applicable Compliance Method:

Compliance with the lb/MMBTU emissions limitation shall be demonstrated based upon the applicable emission tests for this emission limitation specified in section A.V.2.

1.e Emission Limitation:

Volatile organic compound emissions shall not exceed 0.051 lb/MMBTU of actual heat input, as a 3-hour average.

Applicable Compliance Method:

Compliance with the lb/MMBTU emissions limitation shall be demonstrated based upon the applicable emission tests for this emission limitation specified in section A.V.2.

1.f Emission Limitation:

H₂SO₄ emissions shall not exceed 0.16 lb/MMBTU of actual heat input, as a 3-hour average.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the applicable emission tests for this emission limitation specified in section A.V.2.

1.g Emission Limitation:

Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, compliance shall be demonstrated through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

1.h Emission Limitation:

Sulfur dioxide emissions shall not exceed 1.6 lbs/MMBTU of actual heat input, when burning #2 fuel oil in the emissions unit.

Applicable Compliance Method:

Compliance may be determined based upon the records required pursuant to sections A.III.5., A.III.5.a, A.III.5.b, and A.III.5.c above.

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6 or 6A.

1.i Emission Limitation:

The tons of emissions per rolling 12-month period shall not exceed:

PM10 - 73.6;

Sulfur dioxide - 5,606.4;

Nitrogen oxide - 1,033.7

Carbon monoxide - 1,559.3;

Volatile organic compounds - 89.4;

H2SO4 - 280.3.

Applicable Compliance Method:

Compliance with the annual emission limitations shall be demonstrated by the record keeping required pursuant to sections A.III.6. and A.III.7. and the associated emission factors specified in section A.V.

2. The permittee shall conduct, or have conducted, emissions testing for this emissions unit in accordance with the following requirements:

a. The emissions testing shall be conducted within 60 days after achieving the maximum production rate at which the emissions unit will be operated, but not later than 180 days after initial startup of such emissions unit.

b. the emissions testing shall be conducted to demonstrate compliance with the allowable mass emission rate for PM10, Sulfur dioxide, Nitrogen oxide, Carbon monoxide, Volatile organic compounds, and H2SO4;

- c. the emission testing shall be conducted in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4, and Methods 201 and 202 for PM10; Method 6 for Sulfur dioxide; Method 7E for Nitrogen oxide ; Method 10 for Carbon monoxide; Method 25 for Volatile organic compounds; Method 8A for H2SO4. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.
- d. the emissions testing shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Ohio EPA Southeast District Office.

Not later than 30 days prior to the proposed test dates, the permittee shall submit an "Intent to Test" notification to the Ohio EPA Southeast District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the times and dates of the tests, and the persons who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the Ohio EPA Southeast District Office's refusal to accept the results of the emission tests.

Personnel from the Ohio EPA Southeast District Office shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emission tests shall be submitted to the Ohio EPA Southeast District Office within one month following completion of the tests. The permittee may obtain additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA Southeast District Office.

VI. Miscellaneous Requirements

None.

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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
B013 - Modification of the No. 6 Wood Residue Boiler rated at 539 MMBTU/hr, to allow for the burning of Tire Derived Fuel(TDF), NCGs, dewatered sludge, and other milled wood wastes.	None	None

2. Additional Terms and Conditions

2.a None.

II. Operational Restrictions

None.

III. Monitoring and/or Recordkeeping Requirements

1. The permit to install for this emissions unit B013 was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied to this emissions unit for each toxic pollutant, using data from the permit to install application, and modeling was performed for the toxic pollutant(s) emitted at over a ton per year using the SCREEN 3.0 model or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the use of the SCREEN 3.0 (or other approved) model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as required in Engineering Guide #70. The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: Chlorine
TLV (mg/m³): 1,471.83
Maximum Hourly Emission Rate (lbs/hr): 0.4
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m³): 1.10
MAGLC (ug/m³): 35.04

Pollutant: Methylene Chloride
TLV (mg/m³): 86,750
Maximum Hourly Emission Rate (lbs/hr): 2.6
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m³): 7.29
MAGLC (ug/m³): 2,065.5

Pollutant: Napthalene
TLV (mg/m³): 50,000
Maximum Hourly Emission Rate (lbs/hr): 0.5
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m³): 1.32
MAGLC (ug/m³): 1,190.5

Pollutant: Zinc Oxide
TLV (mg/m³): 2,000
Maximum Hourly Emission Rate (lbs/hr): 10.4
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m³): 28.85
MAGLC (ug/m³): 47.62

2. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:
 - a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a compound or chemical with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled, as documented in the most current version of the American Conference of Governmental Industrial Hygienists' (ACGIH's) handbook entitled "TLVs and BEIs, Threshold Limit Values for Chemical Substances and Physical Agents, Biological Exposure Indices";
 - b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
 - c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

3. If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to the emissions of any type of toxic air contaminant not previously emitted, and a modification of the existing permit to install will not be required, even if the toxic air contaminant emissions are greater than the de minimis level in OAC rule 3745-15-05. If the change(s) meet(s) the definition of a "modification" under other provisions of the rule, then the permittee shall obtain a final permit to install prior to the change.

The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy:"

- a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
- b. documentation of the evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
- c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

IV. Reporting Requirements

None.

V. Testing Requirements

None.

VI. Miscellaneous Requirements

None.