



State of Ohio Environmental Protection Agency

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**RE: FINAL PERMIT TO INSTALL MODIFICATION**

**CERTIFIED MAIL**

**WARREN COUNTY**

**Application No: 14-04937**

**Fac ID: 1483000265**

**DATE: 2/8/2005**

Barrett Paving Material Inc  
Dan Gennaro  
600 Shepherd Avenue  
Cincinnati, OH 45215-0000

	TOXIC REVIEW
	PSD
Y	SYNTHETIC MINOR
	CEMS
	MACT
40 CFR 60 Subpart I	NSPS
	NESHAPS
	NETTING
	MAJOR NON-ATTAINMENT
	MODELING SUBMITTED
	GASOLINE DISPENSING FACILITY

Enclosed Please find a modification to the Ohio EPA Permit To Install referenced above which will modify the terms and conditions.

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

HCDES



**FINAL ADMINISTRATIVE MODIFICATION OF PERMIT TO INSTALL 14-04937**

Application Number: 14-04937  
Facility ID: 1483000265  
Permit Fee: **\$625**  
Name of Facility: Barrett Paving Material Inc  
Person to Contact: Dan Gennaro  
Address: 600 Shepherd Avenue  
Cincinnati, OH 45215-0000

Location of proposed air contaminant source(s) [emissions unit(s)]:  
**4000 Turtlecreek Road**  
**Lebanon, Ohio**

Description of proposed emissions unit(s):  
**Administrative Modification to PTI 14-04937 to include new AP-42 Emission Factors, derating of the plant to 300 TPH, and lowering the rolling, 12-month production limitation.**

The above named entity is hereby granted a modification to the permit to install described above pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this modification 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 source(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 included in the application, the above described source(s) of pollutants will be granted the necessary operating permits.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Director

## **Part I - GENERAL TERMS AND CONDITIONS**

### **A. Permit to Install General Terms and Conditions**

#### **1. Compliance Requirements**

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

#### **2. Reporting Requirements**

The permittee shall submit required reports in the following manner:

- a. Reports of any required monitoring and/or recordkeeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
- b. Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the appropriate Ohio EPA District Office or local air agency. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

#### **3. Records Retention Requirements**

Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.

#### **4. Inspections and Information Requests**

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon the premises of this source at any reasonable time for purposes of making inspections, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State air pollution laws and regulations and the terms and conditions of this permit. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may

be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

**5. Scheduled Maintenance/Malfunction Reporting**

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction of any emissions units or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s).

**6. Permit Transfers**

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The appropriate Ohio EPA District Office or local air agency must be notified in writing of any transfer of this permit.

**7. Air Pollution Nuisance**

The air contaminants emitted by the emissions units covered by this permit shall not cause a public nuisance, in violation of OAC rule 3745-15-07.

**8. Termination of Permit to Install**

This Permit to Install shall terminate within eighteen months of the effective date of the Permit to Install if the owner or operator has not undertaken a continuing program of installation or modification or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation or modification. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.

**9. Construction of New Sources(s)**

The proposed emissions unit(s) shall be constructed in strict accordance with the plans and application submitted for this permit to the Director of the Ohio Environmental Protection Agency. There may be no deviation from the approved plans without the express, written approval of the Agency. Any deviations from the approved plans or the above conditions may lead to such sanctions

and penalties as provided under Ohio law. Approval of these plans does not constitute an assurance that the proposed facilities will operate in compliance with all Ohio laws and regulations. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed sources cannot meet the requirements of this permit or cannot meet applicable standards.

If the construction of the proposed emissions unit(s) has already begun or has been completed prior to the date the Director of the Environmental Protection Agency approves the permit application and plans, the approval does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the approved plans. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of OAC rule 3745-31-02. Furthermore, issuance of the Permit to Install does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Approval of the plans in any case is not to be construed as an approval of the facility as constructed and/or completed. Moreover, issuance of the Permit to Install is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities cannot meet the requirements of this permit or cannot meet applicable standards.

**10. Public Disclosure**

The facility is hereby notified that this permit, and all agency records concerning the operation of this permitted source, are subject to public disclosure in accordance with OAC rule 3745-49-03.

**11. Applicability**

This Permit To Install is applicable only to the emissions unit(s) identified in the Permit To Install. Separate Permit To Install for the installation or modification of any other emissions unit(s) are required for any emissions unit for which a Permit To Install is required.

**12. Best Available Technology**

As specified in OAC Rule 3745-31-05, all new sources must employ Best Available Technology (BAT). Compliance with the terms and conditions of this permit will fulfill this requirement.

**13. Source Operation and Operating Permit Requirements After Completion of Construction**

This facility is permitted to operate each source described by this Permit to Install for a period of up to one year from the date the source commenced operation. This permission to operate is granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws, regulations, and policies. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within ninety (90) days after commencing operation of the emissions unit(s) covered by this permit.

**14. Construction Compliance Certification**

The applicant shall provide Ohio EPA with a written certification (see enclosed form) that the facility has been constructed in accordance with the Permit to Install application and the terms and conditions of the Permit to Install. The certification shall be provided to Ohio EPA upon completion of construction but prior to startup of the source.

**15. Fees**

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78. The permittee shall pay all applicable Permit to Install fees within 30 days after the issuance of this Permit to Install.

**B. Permit to Install Summary of Allowable Emissions**

The following information summarizes the total allowable emissions, by pollutant, based on the individual allowable emissions of each air contaminant source identified in this permit.

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

<u>Pollutant</u>	<u>Tons Per Year</u>
PE	11.38
PM10	6.68
SO2	11.05
VOC	35.98
NOx	17.48
CO	99.64

**PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**

**A. Applicable Emissions Limitations and/or Control Requirements**

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P902 - 300 TPH asphaltic concrete batch plant with fabric filter - Modification (plant derated from 410 TPH)	OAC rule 3745-31-05(A)(3)	When burning natural gas, No. 2 fuel oil or waste oil in the drum dryer burner:  Particulate emissions (PE) shall not exceed 13.48 lbs/hr.  Particulate emissions 10 microns and less (PM10) shall not exceed 8.1 lbs/hr.  Volatile organic compound (VOC) emissions shall not exceed 38.7 lbs/hr.  Carbon monoxide (CO) emissions shall not exceed 120.0 lbs/hr.  When using natural gas in the drum dryer burner:  Nitrogen oxides (NOx) emissions shall not exceed 7.5 lbs/hr.  Sulfur dioxide (SO2) emissions shall not exceed 1.4 lbs/hr.  When using No. 2 fuel oil or waste oil in the drum dryer burner:

NOx emissions shall not exceed 36.0 lbs/hr.

SO2 emissions shall not exceed 26.4 lbs/hr.

Total PE from plant load-out shall not exceed 0.16 lb/hr.

Total VOC emissions from plant load-out shall not exceed 1.25 lbs/hr.

Total CO emissions from plant load-out shall not exceed 0.42 lb/hr.

Total PE from plant load-out shall not exceed 0.13 TPY.

Total VOC emissions from plant load-out shall not exceed 1.03 TPY.

Total CO emissions from plant load-out shall not exceed 0.35 TPY.

Total PE from silo filling shall not exceed 0.18 lb/hr.

Total VOC emissions from silo filling shall not exceed 3.66 lbs/hr.

Total CO emissions from silo filling shall not exceed 0.35 lb/hr.

Total PE from silo filling shall not exceed 0.14 TPY.

Total VOC emissions from silo filling shall not exceed 3.02 TPY.

Total CO emissions from silo filling shall not exceed 0.29 TPY.

See terms A.2.a - A.2.e

40 CFR Part 60, Subpart I

The requirements of this rule also include compliance with the requirements of 40 CFR Part 60, Subpart I, OAC rule 3745-35-07(B), OAC rule 3745-21-08(B) and OAC rule 3745-23-06(B).

OAC rule 3745-35-07(B)  
Synthetic Minor to Avoid Title V Requirements

The PE shall not exceed 0.04 grain particulate matter/dscf.

Allowable emissions shall not exceed the following based on rolling, 12-month summations:

PE shall not exceed 11.11 TPY.

Particulate emissions 10 microns and less (PM10) shall not exceed 6.68 TPY.

CO emissions shall not exceed 99.00 TPY.

NOx emissions shall not exceed 17.48 TPY.

SO2 emissions shall not exceed 11.05 TPY.

VOC emissions shall not exceed 31.93 TPY.

OAC rule 3745-17-07(A)(1)

See terms B.3 and B.4.

OAC rule 3745-17-11(B)

The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3)(BAT).

The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3)(BAT).

OAC rule 3745-21-08(B)	See Term A.2.f.
OAC rule 3745-23-06(B)	See Term A.2.f.

**2. Additional Terms and Conditions**

**2.a** All recycled, used oil burned in emissions unit P902 shall meet the following specifications:

Contaminant/Property Allowable Specifications

arsenic	5 ppm, maximum
cadmium	2 ppm, maximum
chromium	10 ppm, maximum
lead	100 ppm, maximum
PCB's	10 ppm, maximum*
total halogens	4000 ppm maximum
mercury	1 ppm, maximum
flash point	100°F, minimum
heat content	135,000 Btu/gallon, minimum

If the permittee is burning used oil with any quantifiable level (2 ppm) of PCB's, then the permittee is subject to the notification requirements of 40 CFR 279.62.

Used oil containing more than 1000 ppm total halogens is presumed to be a hazardous waste under the rebuttable presumption provided under 40 CFR Part 266.40(c) and OAC rule 3745-279. Therefore, the permittee may receive and burn used oil exceeding 1000 ppm of total halogens (but less than 4000 ppm, maximum) only if the supplier ["marketer" in 40 Part CFR 266.43(a)] has demonstrated to the Ohio EPA's Division of Solid and Hazardous Waste Management that the used oil does not contain any hazardous waste.

- 2.b** Visible particulate emissions from any stack associated with emissions unit P902 shall not exceed 10% percent opacity, as a six-minute average, except as specified by rule.
- 2.c** Visible particulate emissions from any fugitive dust emissions point associated with emissions unit P902 shall not exceed 20% percent opacity, as a three-minute average.
- 2.d** The drop height of the front end loader bucket shall be minimized to the extent possible in order to minimize or eliminate visible emissions of fugitive dust from the cold feed bins and recycled material (RAP) bin.

- 2.e** The aggregate loaded into the storage bins shall have a moisture content sufficient to minimize or eliminate the visible emissions of fugitive dust from the elevator and the transfer point to the dryer.
- 2.f** The permittee has satisfied the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in this Permit to Install.

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-23-06(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in this Permit to Install.

- 2.g** The application and enforcement of the provisions of the New Source Performance Standards (NSPS), as promulgated by the United States Environmental Protection Agency, 40 CFR Part 60, are delegated to the Ohio Environmental Protection Agency. The requirements of 40 CFR Part 60 are also federally enforceable.
- 2.h** Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by compliance with the rolling, 12-month emission limitations, compliance with the rolling, 12-month production limitations, and the use of a fabric filter to control emissions from the dryer.
- 2.i** The hourly emission limitations outlined in term A.1. are based upon the emissions unit's potential to emit using the derated value of 300 tons of asphalt produced per hour pursuant to term B.5. Therefore, no hourly records are required to demonstrate compliance with these emissions limitations.

## **B. Operational Restrictions**

1. To ensure the fabric filter is operated according to the manufacturer's specifications and to maintain compliance with the allowable particulate emission rate, the pressure drop across the fabric filter shall be maintained within the range of 3.0 to 5.0 inches of water while the emissions unit is in operation.
2. The Director or any authorized representative of the Director may require or may conduct periodic, detailed chemical analyses through an independent laboratory of any used oil shipment

received by this facility, of any used oil stored at this facility, or of any used oil sampled at the process employing the used oil as fuel, or of any storage tanks at this facility. Additionally, this facility shall provide a plan for documenting that the used oil does not contain any hazardous waste as specified under 40 CFR Parts 261 and 279.

The facility shall notify the USEPA and the Ohio EPA that the used oil being burned exceeds used oil specifications. Before this facility accepts the first shipment of off-specification used oil from a marketer, this facility must provide the marketer a one-time written and signed notice certifying that:

- a. the facility has notified USEPA of its used oil management activities and the notice included the location and description of those activities; and
- b. the facility will burn the used oil only in an industrial furnace or boiler identified in accordance with 40 CFR Part 279.

A copy of each certification notice that this facility sends to a marketer must be kept on file for a minimum of 5 years from the date it last received off-specification used oil from that marketer. The facility shall also submit a copy of each certification notice to the appropriate Ohio EPA District Office.

- 3. The maximum annual asphalt production rate for emissions unit P902 shall not exceed 495,000 tons per year based upon a rolling, 12-month summation of the production rates. To ensure enforceability during the first 12 calendar months of operation following the startup of the modified emissions unit P902, the permittee shall not exceed the production levels specified in the following table:

<u>Month(s)</u>	<u>Maximum Allowable Cumulative Production (Tons)</u>
1	41,250
1-2	82,500
1-3	123,750
1-4	165,000
1-5	206,250
1-6	247,500
1-7	288,750
1-8	330,000
1-9	371,250
1-10	412,500
1-11	453,750
1-12	495,000

After the first 12 calendar months of operation following the startup of the modified emissions unit P902, compliance with the annual production rate limitation shall be based upon a rolling, 12-month summation of the production rates.

4. The maximum annual asphalt production rate, using oil in the drum dryer burner, for emissions unit P902 shall not exceed 237,769 tons per year as a rolling, 12-month summation of the asphalt production rates, using oil in the drum dryer burner. To ensure enforceability during the first 12 calendar months of operation following the startup of the modified emissions unit P902, the permittee shall not exceed the asphalt production specified in the following table:

<u>Month(s)</u>	<u>Maximum Allowable Cumulative Asphalt Production (tons) using oil</u>
1	19,814
1-2	39,628
1-3	59,442
1-4	79,256
1-5	99,070
1-6	118,885
1-7	138,699
1-8	158,513
1-9	178,327
1-10	198,141
1-11	217,955
1-12	237,769

After the first 12 calendar months of operation following the startup of the modified emissions unit P902, compliance with the annual asphalt production rate limitation using oil shall be based upon a rolling, 12-month summation of the asphalt production rates using oil.

5. Pursuant to OAC rule 3745-35-07(B), the hot mix asphalt production capacity of emissions unit P902 is derated from 410 Tons per Hour to 300 Tons per Hour.
6. The use of recycled asphalt product (RAP) shall be limited to 50 percent for surface, base, and intermediate mixes.
7. The permittee may not receive or burn any #2 fuel oil and/or used oil which has a sulfur content greater than 0.50 percent.

**C. Monitoring and/or Recordkeeping Requirements**

1. The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across the fabric filter while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated and maintained in accordance with the manufacturer's

recommendations, instructions and operating manual(s). The permittee shall record the pressure drop across the fabric filter on a once per shift basis.

2. The permittee shall receive a chemical analysis with each shipment of used oil from the supplier. The analysis shall identify the name and address of the supplier, the supplier's USEPA identification number, and the following information:
  - a. the date of shipment or delivery;
  - b. the quantity of used oil received;
  - c. the Btu value of the used oil, in BTU/gallon;
  - d. the flash point of the used oil in degrees F;
  - e. the arsenic content, in ppm;
  - f. the cadmium content, in ppm;
  - g. the chromium content, in ppm;
  - h. the lead content, in ppm;
  - i. the PCB content, in ppm;
  - j. the total halogen content, in ppm;
  - k. the mercury content, in ppm; and
  - l. the sulfur content (%).

Each analysis shall be kept in a readily accessible location for at least 5 years and shall be made available to the Director (the appropriate Ohio EPA District Office or local air agency) upon verbal or written request. The Director or any authorized representative of the Director may require or may conduct periodic, detailed chemical analyses through an independent laboratory of any used oil shipment received by this facility, of any used oil stored at this facility, or of any used oil sampled at the dryer.

3. The permittee shall maintain monthly records of the following information for emissions unit P902:
  - a. the monthly asphalt production, in tons;
  - b. the monthly asphalt production while using oil in the drum dryer burner, in tons;

- c. beginning after the first 12 calendar months following the startup of the modified emissions unit P902, the rolling, 12-month summation of asphalt production calculated by adding the current month's asphalt production to the asphalt production for the preceding eleven calendar months;
- d. beginning after the first 12 calendar months following the startup of the modified emissions unit P902, the rolling, 12-month summation of asphalt production using No. 2 oil and/or waste oil in the drum dryer burner calculated by adding the current month's asphalt production using No. 2 oil and/or waste oil to the asphalt production using No. 2 oil and/or waste oil for the preceding eleven calendar months;
- e. beginning after the first 12 calendar months following the issuance of this permit, the updated rolling, 12-month summation of the actual PE, CO, and OC emissions rates, in tons per rolling, 12-month period, for each month. The summations shall include the information for the current month and the preceding eleven months. The permittee shall calculate the emissions according to the following calculation using the appropriate emissions factors:

actual asphalt production using any fuel type in the dryer (tons asphalt/year, rolling, 12-month summation) x pollutant emissions factor (lb pollutant/ton asphalt) x 1 ton/2000 lbs = TPY, rolling, 12 month summation

where: PE emissions factor is 0.009 lb/ton, based on stack test, 10/2001  
PM10 emissions factor is 0.027 lb/ton, based on AP-42, Fifth Edition, Table 11.1-1, 3/2004  
CO emissions factor is 0.4 lb/ton, based on AP-42, Fifth Edition, Table 11.1-1, 3/2004  
VOC emissions factor is 0.129 lb/ton, based on stack test, 10/2001;

- f. beginning after the first 12 calendar months following the issuance of this permit, the updated rolling, 12-month summation of the actual NOx and SO2 emissions rates, in tons per rolling, 12-month period, for each month. The summations shall include the information for the current month and the preceding eleven months. The permittee shall calculate the emissions according to the following calculations using the appropriate emissions factors and summing totals:
    - i. actual asphalt production using natural gas in the drum dryer burner (tons asphalt/year, rolling, 12-month summation) x pollutant emissions factor (lb pollutant/ton asphalt) x 1 ton/2000 lbs = TPY, rolling, 12 month summation
- where: NOx emissions factor is 0.025 lb/ton, based on AP-42, Fifth Edition, Table 11.1-1, 3/2004  
SO2 emissions factor is 0.0046 lb/ton, based on AP-42, Fifth Edition, Table 11.1-1, 3/2004; and

- ii. actual asphalt production using No. 2 oil or waste oil in the drum dryer burner (tons asphalt/year, rolling, 12-month summation) x pollutant emissions factor (lb pollutant/ton asphalt) x 1 ton/2000 lbs = TPY, rolling, 12 month summation

where: NO<sub>x</sub> emissions factor is 0.12 lb/ton, based on AP-42, Fifth Edition, Table 11.1-1, 3/2004

SO<sub>2</sub> emissions factor is 0.088 lb/ton, based on AP-42, Fifth Edition, Table 11.1-1, 3/2004; and

- g. the maximum percentage RAP used for any mix.
4. The permit to install for this emissions unit (P902) was evaluated based on the actual materials (typically coatings and cleanup 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 for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Ground-Level Concentration (MAGLC).

The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: Xylene

TLV (ug/m3): 434,000

Maximum Hourly Emission Rate (lbs/hr): 1.76

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 7.6

MAGLC (ug/m3): 10,333

Physical changes to or 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 Toxics 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 the "Air Toxic Policy" include the following:

- a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;

- 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.).

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) is (are) defined as a modification under other provisions of the modification definition, 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 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 its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
  - c. when the 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.
- 5. In order to ensure that emissions unit P902 does not operate in excess of the maximum derated operating capacity of 300 TPH, the permittee shall maintain hourly records of the actual hot mix asphalt production rate for each hour of operation of the emissions unit.
  - 6. For each shipment of #2 fuel oil received for burning in this emissions unit, the permittee shall maintain records of the total quantity of oil received and the permittee's or oil supplier's analyses for sulfur content and heat content.

#### **D. Reporting Requirements**

- 1. The permittee shall furnish the Administrator written notification as follows:

A notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under 40 CFR 60.14(e). This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity

of the facility before and after the change, and the expected completion date of the change. The Administrator may request additional relevant information subsequent to this notice.

2. The permittee shall submit quarterly deviation (excursion) reports to the Hamilton County Department of Environmental Services which identify each daily record in which the pressure drop across the baghouse did not comply with the allowable range specified in Term B.1. The deviation report shall include a copy of such record.

If no deviations occurred during the reporting period, the permittee shall state so in the report. The permittee shall submit the reports by January 31, April 30, July 31 and October 31 of each year and shall cover the previous calendar quarters (October through December, January through March, April through June and July through September, respectively).

3. The permittee shall notify the USEPA and the Ohio EPA if any of the used oil exceeds the used oil specifications found in OAC rule 3745-279-11 and/or term A.2.a. If the permittee is burning used oil which exceeds the specifications found in OAC rule 3745-279-11, the permittee is subject to that rule and must comply with all provisions of that rule. The required notification shall be submitted within 30 days of the date in which the exceedance occurred.
4. The permittee shall submit quarterly reports to the Hamilton County Department of Environmental Services which specify the asphalt production rate (in tons) and the asphalt production rate using oil in the drum dryer burner (in tons) for the previous calendar quarter. These reports shall include the rolling, 12-month summation of asphalt production rate and asphalt production rate using oil for each calendar month ending in the reporting period. The permittee shall submit the reports by January 31, April 30, July 31 and October 31 of each year and shall cover the previous calendar quarters (October through December, January through March, April through June and July through September, respectively).
5. Pursuant to the NSPS, the source owner/operator is hereby advised of the requirement to report the following at the appropriate times:
  - a. construction date (no later than 30 days after such date);
  - b. anticipated start-up date (not more than 60 days or less than 30 days prior to such date);
  - c. actual start-up date (within 15 days after such date); and
  - d. date of performance testing (if required, at least 30 days prior to testing).

Reports are to be sent to:

Ohio Environmental Protection Agency  
DAPC - Permit Management Unit  
P. O. Box 163669  
Columbus, Ohio 43216-3669

and

Hamilton County Department of Environmental Services  
250 William Howard Taft Road  
Cincinnati, Ohio 45219

6. The permittee shall submit deviation (excursion) reports that identify all exceedances of the RAP content limit in term B.6.

If no deviations occurred during the reporting period, the permittee shall state so in the report. The permittee shall submit the reports by January 31, April 30, July 31 and October 31 of each year and shall cover the previous calendar quarters (October through December, January through March, April through June and July through September, respectively).

7. The permittee shall submit quarterly deviation reports that identify all exceedances of the sulfur content limit in term B.7.

If no deviations occurred during the reporting period, the permittee shall state so in the report. The permittee shall submit the reports by January 31, April 30, July 31 and October 31 of each year and shall cover the previous calendar quarters (October through December, January through March, April through June and July through September, respectively).

## **E. Testing Requirements**

1. Emissions Limitations

The PE shall not exceed 13.48 lbs/hr.

The PE shall not exceed 0.04 grain particulate matter/dscf.

The particulate emissions 10 microns and less (PM10) shall not exceed 8.1 lbs/hr.

The VOC emissions shall not exceed 38.7 lbs/hr.

The CO emissions shall not exceed 120.0 lbs/hr.

The NOx emissions shall not exceed 7.5 lbs/hr (natural gas) or 36.0 lbs/hr (No. 2 or waste oil).

The SO2 emissions shall not exceed 1.4 lbs/hr (natural gas) or 26.4 lbs/hr (No. 2 or waste oil).

### Applicable Compliance Methods

The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

- a. the emission testing shall be conducted within 60 days after issuance of this permit;
- b. the emission testing shall be conducted to demonstrate compliance with the allowable PE, CO, NOx, SO2 and OC emissions rates;

- c. the following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): for PE emissions, Method 5; for CO emissions, Method 10, for NO<sub>x</sub> emissions, Method 7; for SO<sub>2</sub> emissions, Method 6; for OC emissions, Method 25. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA or Hamilton County Department of Environmental Services; and
- d. the test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Ohio EPA or Hamilton County Department of Environmental Services;

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Hamilton County Department of Environmental Services. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Hamilton County Department of Environmental Services refusal to accept the results of the emission test(s).

Personnel from the Hamilton County Department of Environmental Services shall be permitted to witness the test(s), 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 emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Hamilton County Department of Environmental Services within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Hamilton County Department of Environmental Services.

## 2. Emissions Limitations

The total PE from plant load-out shall not exceed 0.16 lb/hr.  
The total VOC emissions from plant load-out shall not exceed 1.25 lbs/hr.  
The total CO emissions from plant load-out shall not exceed 0.42 lb/hr.

The total PE from plant load-out shall not exceed 0.13 TPY.  
The total VOC emissions from plant load-out shall not exceed 1.03 TPY.  
The total CO emissions from plant load-out shall not exceed 0.35 TPY.

Compliance with the plant load-out emissions limitations shall be demonstrated by applying the emissions factors from AP-42, Fifth Edition, Table 11.1-4, 3/2004 in the following equations for each pollutant:

- a. actual asphalt production rate (tons asphalt/hr) x AP-42 emissions factor (lb pollutant/ton asphalt) = lb pollutant/hr; and
- b. actual asphalt production rate (tons asphalt/yr) x AP-42 emissions factor (lb pollutant/ton asphalt) x 1 ton/2000 lbs = TPY pollutant

where: PE emissions factor is  $0.000181 + 0.00141(-V)e^{((0.0251)(T+460)-20.43)}$   
VOC emissions factor is  $0.0172(-V)e^{((0.0251)(T+460)-20.43)}$   
CO emissions factor is  $0.0058(-V)e^{((0.0251)(T+460)-20.43)}$  ; and

V = site-specific asphalt volatility (percent loss-on-heating) or default value of -0.5  
T = site-specific asphalt mix temperature, °F or default value of 325 °F.

3. Emissions Limitations

The total PE from silo filling shall not exceed 0.18 lb/hr.  
The total VOC emissions from silo filling shall not exceed 3.66 lbs/hr.  
The total CO emissions from silo filling shall not exceed 0.35 lb/hr.

The total PE from silo filling shall not exceed 0.14 TPY.  
The total VOC emissions from silo filling shall not exceed 3.02 TPY.  
The total CO emissions from silo filling shall not exceed 0.29 TPY.

Compliance with the silo filling emissions limitations shall be demonstrated by applying the emissions factors from AP-42, Fifth Edition, Table 11.1-4, 3/2004 in the following equations for each pollutant:

- a. actual asphalt production rate (tons asphalt/hr) x AP-42 emissions factor (lb pollutant/ton asphalt) = lb pollutant/hr; and
- b. actual asphalt production rate (tons asphalt/yr) x AP-42 emissions factor (lb pollutant/ton asphalt) x 1 ton/2000 lbs = TPY pollutant

where: PE emissions factor is  $0.000332 + 0.00105(-V)e^{((0.0251)(T+460)-20.43)}$   
VOC emissions factor is  $0.0504(-V)e^{((0.0251)(T+460)-20.43)}$   
CO emissions factor is  $0.00488(-V)e^{((0.0251)(T+460)-20.43)}$  ; and

V = site-specific asphalt volatility (percent loss-on-heating) or default value of -0.5  
T = site-specific asphalt mix temperature, °F or default value of 325 °F.

4. Emissions Limitations

Allowable emissions shall not exceed the following based on rolling, 12-month summations:

The PE shall not exceed 11.11 TPY.

The particulate emissions 10 microns and less (PM10) shall not exceed 6.68 TPY.  
The CO emissions shall not exceed 99.00 TPY.  
The NOx emissions shall not exceed 17.48 TPY.  
The SO2 emissions shall not exceed 11.05 TPY.  
The VOC emissions shall not exceed 31.93 TPY.

Compliance with the rolling, 12-month annual emissions limitations shall be demonstrated by the recordkeeping requirements in Term C.3.

5. Emissions Limitations

Visible particulate emissions from any stack associated with emissions unit P902 shall not exceed 10% percent opacity, as a six-minute average, except as specified by rule.

Visible particulate emissions from any fugitive dust emissions point associated with emissions unit P902 shall not exceed 20% percent opacity, as a three-minute average.

Applicable Compliance Method

Compliance shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996.

6. Compliance with the used oil specifications in Term A.2.a. shall be demonstrated by the record keeping requirements in Term C.2.
7. Compliance with the annual asphalt production limitations in Terms B.3. and B.4. shall be demonstrated by the record keeping requirements in Term C.3.
8. Compliance with the sulfur content limitation in term B.7 shall be demonstrated by the record keeping requirements in Term C.6.

**F. Miscellaneous Requirements**

1. If probable cause exists indicating the source is causing or contributing to a nuisance in violation of Ohio Administrative Code rule 3745-15-07, the owner or operator of this emissions unit shall be required to submit and implement a control program which will bring this source into compliance.
2. The terms and conditions of this PTI supersede those established in 14-4660 as issued on November 16, 2000.
3. The following terms and conditions of this permit are federally enforceable: A., B., C.1- C.3, C.5, C.6, D., and E.