

**X Synthetic Minor Determination and/or  Netting Determination  
Permit To Install 07-00529**

**A. Source Description**

Shelly Materials Plant #1 is proposing to use natural gas, #2 oil and waste 'on-spec' oil as alternative fuels for the 290 TPH hot mix asphalt batch plant.

**B. Facility Emissions and Attainment Status**

Shelly Materials Plant #1 is located in Lawrence County which is currently attainment for all criteria pollutants. The maximum potential to emit is greater than 100 tons per year for carbon monoxide, volatile organic compounds and sulfur dioxide.

**C. Source Emissions**

Shelly Materials Plant #1 will restrict the plant's annual production to 400,000 tons per 12-month rolling period. With the proposed production restriction, total emissions per 12-month rolling period will be limited to 73.6 tons CO, 15.4 tons NO<sub>x</sub>, 31.2 tons SO<sub>2</sub>, 19.8 tons VOC, 2.4 tons PE, and 0.9 tons fugitive PE. The PTI requires record keeping to ensure compliance with the production restriction.

**D. Conclusion**

The operational restrictions, emission limits, emissions testing, record keeping and reporting requirements of this permit are sufficient to provide federally enforceable limitations to limit the potential to emit from this emissions unit below the Title V threshold of 100 tons per year.



State of Ohio Environmental Protection Agency

Street Address:

Mailing Address:

Lazarus Gov. Center TELE: (614) 644-3020 FAX: (614) 644-2329

Lazarus Gov.  
Center

**RE: DRAFT PERMIT TO INSTALL  
LAWRENCE COUNTY  
Application No: 07-00529**

**CERTIFIED MAIL**

**DATE:** 11/20/2003

Shelly Materials - Plant No. 1  
Larry Shivley  
P.O. Box 266 8775 Blackbird Ln  
Thornville, OH 43076-9790

You are hereby notified that the Ohio Environmental Protection Agency has made a draft action recommending that the Director issue a Permit to Install for the air contaminant source(s) [emissions unit(s)] shown on the enclosed draft permit. This draft action is not an authorization to begin construction or modification of your emissions unit(s). The purpose of this draft is to solicit public comments on the proposed installation. A public notice concerning the draft permit will appear in the Ohio EPA Weekly Review and the newspaper in the county where the facility will be located. Public comments will be accepted by the field office within 30 days of the date of publication in the newspaper. Any comments you have on the draft permit should be directed to the appropriate field office within the comment period. A copy of your comments should also be mailed to Robert Hodanbosi, Division of Air Pollution Control, Ohio EPA, P.O. Box 1049, Columbus, OH, 43266-0149.

A Permit to Install may be issued in proposed or final form based on the draft action, any written public comments received within 30 days of the public notice, or record of a public meeting if one is held. You will be notified in writing of a scheduled public meeting. Upon issuance of a final Permit to Install a fee of **\$1000** will be due. Please do not submit any payment now.

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. If you have any questions about this draft permit, please contact the field office where you submitted your application, or Mike Ahern, Field Operations & Permit Section at (614) 644-3631.

Very truly yours,

Michael W. Ahern, Supervisor  
Field Operations and Permit Section  
Division of Air Pollution Control

CC: USEPA

PCHD

KY

WV

**LAWRENCE COUNTY**

**PUBLIC NOTICE**

**ISSUANCE OF DRAFT PERMIT TO INSTALL 07-00529 FOR AN AIR CONTAMINANT SOURCE FOR  
SHELLY MATERIALS - PLANT NO. 1**

On 11/20/2003 the Director of the Ohio Environmental Protection Agency issued a draft action of a Permit To Install an air contaminant source for **Shelly Materials - Plant No. 1**, located at **Rte.4, St. Rt. 7, Proctorville, Ohio**.

Installation of the air contaminant source identified below may proceed upon final issuance of Permit To Install 07-00529:

**Modification to allow the use of alternative fuels at the Asphalt Batch Plant.**

Comments concerning this draft action, or a request for a public meeting, must be sent in writing to the address identified below no later than thirty (30) days from the date this notice is published. All inquiries concerning this draft action may be directed to the contact identified below.

Cindy Charles, Portsmouth City Health Department, 740 Second Street, Portsmouth, OH 45662  
[(740)353-5156]



**Permit To Install  
Terms and Conditions**

**Issue Date: To be entered upon final issuance  
Effective Date: To be entered upon final issuance**

**DRAFT PERMIT TO INSTALL 07-00529**

Application Number: 07-00529  
APS Premise Number: 0744000097  
Permit Fee: **To be entered upon final issuance**  
Name of Facility: Shelly Materials - Plant No. 1  
Person to Contact: Larry Shivley  
Address: P.O. Box 266 8775 Blackbird Ln  
Thornville, OH 43076-9790

Location of proposed air contaminant source(s) [emissions unit(s)]:

**Rte.4, St. Rt. 7  
Proctorville, Ohio**

Description of proposed emissions unit(s):

**Modification to allow the use of alternative fuels at the Asphalt Batch Plant.**

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

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Director

**Shelly Materials - Plant No. 1**

**Facility ID: 0744000097**

**PTI Application: 07-00529**

**Issued: To be entered upon final issuance**

**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

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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

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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**

- 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

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Title V permit modification application within twelve (12) months after commencing operation of the emissions units covered by this permit. However, if the proposed new or modified source(s) would be prohibited by the terms and conditions of an existing Title V permit, a Title V permit modification must be obtained before the operation of such new or modified source(s) pursuant to OAC rule 3745-77-04(D) and OAC rule 3745-77-08(C)(3)(d).

- b. If the permittee is required to apply for permit(s) pursuant to OAC Chapter 3745-35, the source(s) identified in this Permit To Install is (are) permitted to operate for a period of up to one year from the date the source(s) commenced operation. Permission to operate is granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws, regulations, and policies. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within ninety (90) days after commencing operation of the source(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>
CO	73.6
VOC	19.8
NOx	15.4
SO2	31.2
PM/PM10(stack)	2.4
PM(fugitive)	0.9
PM10(fugitive)	0.43

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Issue

Facility ID: 0744000097

Emissions Unit ID: P001

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

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

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

Operations, Property,  
and/or Equipment

Applicable Rules/Requirements

P001 - 290 TPH Hot Mix Asphalt  
Batch Plant (natural gas/#2 fuel  
oil/used oil fired)with a baghouse

OAC rule 3745-31-05(A)(3)

OAC rule 3745-31-05(D)

aggregate storage bins, cold  
aggregate elevator

Shell

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Emissions Unit ID: P001

Applicable Emissions  
Limitations/Control Measures

40 CFR Part 60, Subpart I

Emissions from the baghouse stack shall not exceed:

45.3 pounds per hour (lbs/hr) sulfur dioxide (SO<sub>2</sub>);

22.3 lbs/hr nitrogen oxides (NO<sub>x</sub>);

28.7 lbs/hr volatile organic compounds (VOC);

106.7 lbs/hr carbon monoxide (CO);

3.48 lbs/hr particulate matter/particulate matter less than 10 microns (PM/PM<sub>10</sub>);

OAC rule 3745-23-06(B)

OAC rule 3745-17-07(A)

See Section A.2.a for emission control measures.

OAC rule 3745-17-11(B)

The requirements of this rule also include compliance with the requirements of 40 CFR Part 60 Subpart I, OAC rule 3745-23-06(B) and OAC rule 3745-31-05(D).

OAC rule 3745-18-06(E)

Emissions shall not exceed, as a 12 month rolling summation:

OAC rule 3745-31-05(A)(3)

- 73.6 TPY CO
- 31.2 TPY SO<sub>2</sub>
- 19.8 TPY VOC
- 15.4 TPY NO<sub>x</sub>
- 2.4 TPY PM/PM<sub>10</sub>
- 0.9 TPY PM (fugitive)
- 0.43 TPY PM<sub>10</sub> (fugitive)

PE from the stack shall not exceed

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0.04 grain/dscf.

emissions of fugitive dust from the elevator loading area.

The emissions unit shall not discharge into the atmosphere any stack gases which exhibit 20 percent opacity or greater.

The aggregate loaded into the storage bins shall have a moisture content sufficient to eliminate the visible emissions of fugitive dust from the and the transfer point to the dryer.

See Section A.2.b.

The emissions limitation specified by this rule is equivalent to the emission limitation established pursuant to 40 CFR Part 60 Subpart I.

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

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

Visible PE of fugitive dust shall be less than or equal to 10% opacity, as a 3-minute average.

Emissions of fugitive PM shall not exceed 2.0 pounds per hour.

Emissions of fugitive PM<sub>10</sub> shall not exceed 0.96 pounds per hour.

The drop height of the front end loader bucket shall be minimized to the extent possible in order to minimize or eliminate visible

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Emissions Unit ID: **P001****Issued: To be entered upon final issuance****2. Additional Terms and Conditions**

- 2.a** The baghouse shall be used at all times when the emissions unit is in operation.
- 2.b** The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-23-06, by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3).
- 2.c** 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.

**B. Operational Restrictions**

1. To ensure the baghouse is operated according to the manufacturer's specifications and to maintain compliance with the allowable particulate emission rate, the pressure drop across the baghouse shall be maintained within the range of 2.0 to 8.0 inches of water while the emissions unit is in operation.
2. The maximum asphalt production rate for emissions unit P001 shall not exceed 400,000 tons based upon a 12-month rolling summation of the production rates. To ensure enforceability during the first 12 calendar months of operation following the startup of the modified emissions unit P001, 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	200,000
1-2	300,000
1-3	400,000
1-4	400,000
1-5	400,000
1-6	400,000
1-7	400,000
1-8	400,000
1-9	400,000
1-10	400,000
1-11	400,000
1-12	400,000

After the first 12 calendar months of operation following the startup of the modified emissions unit P001, compliance with the production rate limitation shall be based upon a 12-month rolling summation of the production rates.

3. All recycled, used oil burned in emissions unit P001 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	50 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  $\geq 2$  ppm < 50 ppm of PCB's, then the permittee is subject to any applicable requirements found under 40 CFR part 279, subparts G and H and 40 CFR 761.20 (e).

\*\* Used oil containing more than 1000 ppm total halogens is presumed to be a hazardous waste under the rebuttable presumption provided under 40 CFR 279.10 (b)(1)(ii) and OAC rule 3745-279-10 (B)(1)(b). Therefore, the permittee may receive and burn used oil exceeding 1000 ppm of total halogens (but less than 4000 ppm, maximum) only if the used oil burner can demonstrate the used oil does not contain any hazardous waste pursuant to OAC rule 3745-279-63.

4. The burning of hazardous waste is prohibited without first complying with all applicable state and federal hazardous waste and air regulations and permits.
5. The permittee shall only burn low sulfur fuels, containing less than 0.5% sulfur by weight, in this emissions unit.
6. The permittee may substitute recycled asphalt pavement (RAP) aggregates in the raw material feed mix in amounts not to exceed 50% of all aggregate materials introduced, based on a monthly average of all aggregate material.

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

1. The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across the baghouse 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

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drop across the baghouse on a once per day basis.

2. The permittee shall maintain monthly records of the following information for emissions unit P001:
  - a. The asphalt production, in tons.
  - b. For the first 12 calendar months following the startup of the modified emissions unit P001, the cumulative asphalt production calculated by adding the current month's asphalt production to the asphalt production for each calendar month since the startup of the modified emissions unit P001.
  - c. Beginning after the first 12 calendar months following the startup of the modified emissions unit P901, the 12-month rolling summation of asphalt production calculated by adding the current month's asphalt production to the asphalt production for the preceding eleven calendar months.
  - d. The total amount of aggregate used in the raw material feed mix.
  - e. The amount of RAP used in the raw material feed mix.
  - f. The average percentage of RAP used (e. divided by d. multiplied by 100).
3. For each shipment of 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 the following:
  - a. The date(s) of shipment or delivery.
  - b. The quantity of oil received.
  - c. The heat content, in BTU/gallon.
  - d. The flash point, in degrees F (required only for used oil).
  - e. The arsenic content, in ppm (required only for used oil).
  - f. The cadmium content, in ppm (required only for used oil).
  - g. The chromium content, in ppm (required only for used oil).
  - h. The lead content, in ppm (required only for used oil).
  - i. The PCB content, in ppm (required only for used oil).
  - j. The total halogen content, in ppm (required only for used oil).
  - k. The mercury content, in ppm (required only for used oil).
  - l. The sulfur content, in percent (%) by weight.

A shipment may be comprised of multiple tank truck loads from the same supplier's batch, or may

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be represented by single or multiple pipeline deliveries from the same supplier's batch, and the quality of the oil for those loads or pipeline deliveries may be represented by a single batch analysis from the supplier.

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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.

The permittee shall maintain records of the oil burned in this emissions unit in accordance with either Alternative 1 or Alternative 2 described below.

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 permittee's or oil supplier's analyses for items a - l above. 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.

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 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, and the permittee's analyses for items a - l above.

4. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible PE from the stack and any visible fugitive PE from the aggregate storage bins and cold aggregate elevator associated with this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
- a. The color of the emissions;
  - b. Whether the emissions are representative of normal operations;
  - c. If the emissions are not representative of normal operations, the cause of the abnormal emissions;
  - d. The total duration of any visible emission incident; and
  - e. Any corrective actions taken to eliminate the visible emissions.

**D. Reporting Requirements**

**Shell**

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Emissions Unit ID: **P001**

1. The permittee shall submit quarterly deviation (excursion) reports that identify the following:

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- a. All periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified in Section B.1.
- b. All exceedances of the 12-month rolling production rate limitation and, for the first 12 calendar months of operation following the issuance of this permit, all exceedances of the maximum allowable cumulative production levels.
- c. All exceedances of sulfur content fuel restriction specified in Section B.5.

These reports shall due by the dates specified in Part I - General Terms and Conditions of this permit under Section A.2.

2. 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 the applicable portions of 40 CFR part 761, and shall also notify Ohio EPA if any used oil exceeds the mercury limitation and falls below the heat content limitation listed in Section B.3 within thirty days after the exceedance occurs. If the permittee is burning used oil which exceeds the specifications found in OAC rule 3745-279-11 and the applicable portions 40 CFR part 761, the permittee is subject to that rule and must comply with all applicable provisions of that rule(s).
3. The permittee shall submit deviation (excursion) reports which identify any exceedance of the 50 percent RAP content limitation specified in Section B.6. The notification shall be sent to the Portsmouth Local Air Agency within 30 days after the exceedance occurs.
4. The permittee shall submit semiannual written reports that include the following:
  - a. An identification of all days during which any visible PE or fugitive PE were observed from the stack and the aggregate storage bins and cold aggregate elevator associated with this emissions unit.
  - b. A description of any corrective actions taken to eliminate the visible particulate emissions.

These reports shall be submitted to the Portsmouth Local Air Agency by January 31 and July 31 of each year and shall cover the previous 6-month period.

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);

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- 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

Portsmouth Local Air Agency  
 605 Washington St, Third floor  
 Portsmouth, OH 45662

## **E. Testing Requirements**

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

- a. Emission Limitation:  
 PE from the stack shall not exceed 0.04 grain/dscf

Applicable Emission Limitation

Compliance shall be determined in accordance with Test Methods 1-5 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources").

- b. Emission Limitation:  
 Emissions shall not exceed 2.4 tons PM/PM<sub>10</sub> from the stack as a 12-month rolling summation.

Applicable Compliance Method:

Compliance shall be determined based upon the following equation:

$$E = EF * AAPR * 1 \text{ ton}/2000 \text{ lb} = \text{TPY of particulates}$$

Where

EF is the PE emission factor in lb/ton, and is based on the most recent stack test as required in Section E. 6, and AAPR, is the actual asphalt production rate, in tons for each

**Shell**

**PTI**

Emissions Unit ID: **P001**

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12-month period as monitored and recorded in Section C. 2. \*The emissions factor used to calculate the PE mass emission limitation is 0.012 lb PE/ton asphalt produced. This emissions factor is based on best engineering judgement and was developed using emissions testing data from similar sources.

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- c. Emission Limitation:  
The emissions unit shall not discharge into the atmosphere any stack gases which exhibit 20 percent opacity or greater.

Applicable Compliance Method:

If required, 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").

- d. Emission Limitation:  
Visible PE of fugitive dust shall be less than or equal to 10% opacity, as a 3-minute average.

Applicable Compliance Method:

If required, 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").

- e. Emissions Limitation:  
Emissions shall not exceed 0.9 ton fugitive PM as a 12-month rolling summation.

Applicable Compliance Method:

Compliance with the annual emissions limitation shall be assumed based upon the following worst case calculation, where total fugitive emissions equal the summation of the fugitives from the aggregate storage bins, cold aggregate elevator, and associated operations:

$$((200,000 \text{ tons of aggregate/year} \times 0.0069 \text{ lb PM/ton of aggregate}) + (200,000 \text{ tons of sand/year} \times 0.0021 \text{ lb PM/ton of sand})) \times (1 \text{ ton}/2000 \text{ lb}) = 0.9 \text{ ton}$$

The emissions factors in the above equation are derived from AP-42, Fifth Edition, Table 11.12-2( 10/01).

- f. Emissions Limitation:  
Emissions shall not exceed 0.43 ton fugitive PM<sub>10</sub> as a 12-month rolling summation.

Applicable Compliance Method:

Compliance with the annual emissions limitation shall be assumed based upon the following worst case calculation, where total fugitive emissions equal the summation of the fugitives from the aggregate storage bins, cold aggregate elevator, and associated operations:

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$((200,000 \text{ tons of aggregate/year} \times 0.0033 \text{ lb PM}_{10}/\text{ton of aggregate}) + (200,000 \text{ tons of sand/year} \times 0.00099 \text{ lb PM}_{10}/\text{ton of sand})) \times (1 \text{ ton}/2000 \text{ lb}) = 0.9 \text{ ton}$

The emissions factors in the above equation are derived from AP-42, Fifth Edition, Table 11.12-2( 10/01).

- g. Emission Limitation:  
Emissions of fugitive PM shall not exceed 2.0 pounds per hour.

Applicable Compliance Method:

Compliance with the hourly fugitive PM emissions limitation shall be assumed based on multiplying the worst case AP-42 emission factor of 0.0069 lb PM/ton (Fifth Edition, Table 11.12-2,10/01) by the maximum rated capacity of P001 (290 TPH).

- h. Emission Limitation:  
Emissions of fugitive PM<sub>10</sub> shall not exceed 0.96 pounds per hour.

Applicable Compliance Method:

Compliance with the hourly fugitive PM<sub>10</sub> emissions limitation shall be assumed based on multiplying the worst case AP-42 emission factor of 0.0033 lb PM<sub>10</sub>/ton (Fifth Edition, Table 11.12-2,10/01) by the maximum rated capacity of P001 (290 TPH).

- i. Emission Limitation:  
Emissions shall not exceed 106.7 lbs/hr CO.

Applicable Compliance Method:

Compliance shall be determined in accordance with Test Methods 1-4 and 10 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"). \*The emissions factor used to calculate the CO mass emission limitation is 0.368 lb CO/ton asphalt produced. This emissions factor is based on best engineering judgement and was developed using emissions testing data from similar sources.

- j. Emission Limitation:  
Emissions shall not exceed 73.6 tons CO as a 12-month rolling summation.

Applicable Compliance Method:

Compliance shall be determined based upon the following equation:

$$E = EF * AAPR * 1 \text{ ton}/2000 \text{ lb} = \text{TPY of CO}$$

Where

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EF is the CO emission factor in lb/ton, and is based on the most recent stack test as required in Section E. 6, and

AAPR, is the actual asphalt production rate, in tons for each 12-month period as monitored and recorded in Section C. 2.

- k. Emission Limitation:  
Emissions shall not exceed 45.3 lbs/hr SO<sub>2</sub>.

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Applicable Compliance Method:

Compliance shall be determined in accordance with Test Methods 1-4 and 6 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"). \*The emissions factor used to calculate the SO<sub>2</sub> mass emission limitation is 0.156 lb SO<sub>2</sub>/ton asphalt produced. This emissions factor is based on best engineering judgement and was developed using emissions testing data from similar sources.

- l. Emission Limitation:  
Emissions shall not exceed 31.2 tons SO<sub>2</sub> as a 12-month rolling summation.

Applicable Compliance Method:

Compliance shall be determined based upon the following equation:

$$E = EF * A APR * 1 \text{ ton}/2000 \text{ lb} = \text{TPY of SO}_2$$

Where

EF is the SO<sub>2</sub> emission factor in lb/ton, and is based on the most recent stack test as required in Section E. 6, and

AAPR, is the actual asphalt production rate, in tons for each 12-month period as monitored and recorded in Section C. 2.

- m. Emission Limitation:  
Emissions shall not exceed 22.3 lbs/hr NO<sub>x</sub>.

Applicable Compliance Method:

Compliance shall be determined in accordance with Test Methods 1-4 and 7 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"). \*The emissions factor used to calculate the NO<sub>x</sub> mass emission limitation is 0.077 lb NO<sub>x</sub>/ton asphalt produced. This emissions factor is based on best engineering judgement and was developed using emissions testing data from similar sources.

- n. Emission Limitation:  
Emissions shall not exceed 15.4 tons NO<sub>x</sub> as a 12-month rolling summation.

Applicable Compliance Method:

Compliance shall be determined based upon the following equation:

$$E = EF * A APR * 1 \text{ ton}/2000 \text{ lb} = \text{TPY of NO}_x$$

Where

EF is the NO<sub>x</sub> emission factor in lb/ton, and is based on the most recent stack test as required in Section E. 6, and AAPR, is the actual asphalt production rate, in tons for each 12-month period as monitored and recorded in Section C. 2.

- o. Emission Limitation:  
Emissions shall not exceed 28.7 lbs/hr VOC.

Applicable Compliance Method:

Compliance shall be determined in accordance with Test Methods 1 - 4 and 25 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"). \*The emissions factor used to calculate the VOC mass emission limitation is 0.099 lb VOC/ton asphalt produced. This emissions factor is based on best engineering judgement and was developed using emissions testing data from similar sources.

- p. Emission Limitation:  
Emissions shall not exceed 19.8 tons VOC as a 12-month rolling summation.

Applicable Compliance Method:

Compliance shall be determined based upon the following equation:

$$E = EF * AAPR * 1 \text{ ton}/2000 \text{ lb} = \text{TPY of VOC's}$$

Where

EF is the VOC emission factor in lb/ton, and is based on the most recent stack test as required in Section E. 6, and  
AAPR, is the actual asphalt production rate, in tons for each 12-month period as monitored and recorded in Section C. 2.

2. 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 3 months after startup of the modified emissions unit.
  - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate(s) for PM/PM<sub>10</sub>, CO, NO<sub>x</sub>, SO<sub>2</sub>, and VOC.
  - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): Methods 1-5 for PM/PM<sub>10</sub>, Method 25 for VOC,

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Method 1-4 and 10 for CO, Method 1-4 and 6 for SO<sub>2</sub>, and Method 1-4 and 7 for NO<sub>x</sub>.

- d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity using worst case fuel and per cent of RAP listed in air permit, unless otherwise specified or approved by the Portsmouth Local Air Agency.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Portsmouth Local Air Agency. 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 Portsmouth Local Air Agency's refusal to accept the results of the emission test(s).

Personnel from the Portsmouth Local Air Agency 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 Portsmouth Local Air Agency 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 Portsmouth Local Air Agency.

**F. Miscellaneous Requirements**

1. The permit to install for this emissions unit (P001) 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 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 Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: Heptane

TLV (mg/m<sup>3</sup>): 1639.26

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Maximum Hourly Emission Rate (lbs/hr): 2.73

Predicted 1-Hour Maximum Ground-Level  
Concentration (ug/m3): 400.3

MAGLC (ug/m3): 39030

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 still 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:

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- a. Changes in the composition of the materials used 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(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), 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 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. 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.