

**Synthetic Minor Determination and/or**  **Netting Determination**  
Permit To Install **NUMBER 16-02427**

**A. Source Description**

Shalersville Asphalt Company has requested a federally enforceable state operating permit (FESOP) for their asphalt batching plant #1, which is located in Mantua, Ohio. The Mantua plant, classified as an existing facility, has a maximum asphalt production capacity of 250 tons per hour, is fired with only natural gas, and uses a cyclone scrubber to control particulate emissions.

**B. Facility Emissions and Attainment Status**

Based on the maximum production capacity of this emissions unit, the uncontrolled/unrestricted potential annual emissions of particulates and carbon monoxide are each above their respective Title V threshold levels. Uncontrolled/unrestricted potential annual emissions of all other pollutants, including hazardous air pollutants (HAP's) and criteria pollutants, except particulates and carbon monoxide, are below the respective Title V thresholds. Emissions calculations are based on F.I.R.E. factors for SCC 3-05-002-47, Batch mix asphaltic concrete plants with natural gas fired rotary dryers.

**C. Source Emissions**

Shalersville Asphalt Company has proposed to limit asphalt production to 495,000 tons per rolling 12-month period, in order to reduce annual emissions of particulates and carbon monoxide to under 100 tons per year (TPY) each. The monthly production strategy defines the proposed monthly operating conditions for the facility that will ensure particulate and carbon monoxide emissions under the Title V threshold.

**D. Conclusion**

The federally enforceable production restriction of 495, 000 tons of asphalt per rolling 12-month period combined with the other federally enforceable terms and conditions of the FESOP will ensure the facility will not be a major source subject to Title V permitting.



State of Ohio Environmental Protection Agency

Street Address:

Lazarus Gov. Center  
122 S. Front Street  
Columbus, OH 43215

TELE: (614) 644-3020 FAX: (614) 644-2329

Mailing Address:

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

**RE: DRAFT PERMIT TO INSTALL  
PORTAGE COUNTY  
Application No: 16-02427  
Fac ID: 1667050012**

**CERTIFIED MAIL**

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

**DATE:** 3/2/2006

Shalersville Asphalt Co  
David Ronyak  
PO Box 540  
Burton, OH 44021

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 **\$2500** 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.

Sincerely,

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

**PORTAGE COUNTY**

**PUBLIC NOTICE**

**ISSUANCE OF DRAFT PERMIT TO INSTALL 16-02427 FOR AN AIR CONTAMINANT SOURCE FOR  
Shalersville Asphalt Co**

On 3/2/2006 the Director of the Ohio Environmental Protection Agency issued a draft action of a Permit To Install an air contaminant source for **Shalersville Asphalt Co**, located at **3486 Frost Rd, Mantua, Ohio**.

Installation of the air contaminant source identified below may proceed upon final issuance of Permit To Install 16-02427:

**Change in the Method of Operation-RAP Inclusion in Asphalt Batching.**

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.

Lynn Malcolm, Akron Regional Air Quality Management District, 146 South High Street, Room 904, Akron, OH 44308 [(330)375-2480]



**DRAFT PERMIT TO INSTALL 16-02427**

Application Number: 16-02427  
Facility ID: 1667050012  
Permit Fee: **To be entered upon final issuance**  
Name of Facility: Shalersville Asphalt Co  
Person to Contact: David Ronyak  
Address: PO Box 540  
Burton, OH 44021

Location of proposed air contaminant source(s) [emissions unit(s)]:  
**3486 Frost Rd  
Mantua, Ohio**

Description of proposed emissions unit(s):  
**Change in the Method of Operation-RAP Inclusion in Asphalt Batching.**

The above named entity is hereby granted a Permit to Install for the above described emissions unit(s) pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this permit does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the above described emissions unit(s) of environmental pollutants will operate in compliance with applicable State and Federal laws and regulations, and does not constitute expressed or implied assurance that if constructed or modified in accordance with those plans and specifications, the above described emissions unit(s) of pollutants will be granted the necessary permits to operate (air) or NPDES permits as applicable.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Director

**Shalersville Asphalt Co**

**PTI Application: 16-02427**

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

**Facility ID: 1667050012**

## **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,

**Shalersville Asphalt Co****PTI Application: 16-02427****Issued: To be entered upon final issuance****Facility ID: 1667050012**

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**

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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**

<b><u>Pollutant</u></b>	<b><u>Tons Per Year</u></b>
<b>CO</b>	<b>99.00 (stack)</b>
<b>CO</b>	<b>0.63 (fugitive)</b>
<b>NO<sub>x</sub></b>	<b>6.19 (stack)</b>
<b>VOCs</b>	<b>2.03 (stack)</b>
<b>VOCs</b>	<b>3.92 (fugitive)</b>
<b>SO<sub>2</sub></b>	<b>1.14 (stack)</b>
<b>PE</b>	<b>34.65 (stack)</b>
<b>PE</b>	<b>17.72 (fugitive)</b>

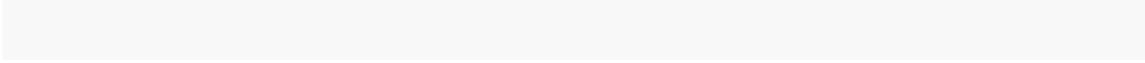
**Shalersville Asphalt Co**

**PTI Application: 16-02427**

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

**Facility ID: 1667050012**

**Emissions Unit ID: P901**



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

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
<p>P901 - (Baldwin Lima Hamilton model 481) Asphalt Batching Plant no. 1 - existing facility, manufactured and installed in 1967, batch-mix hot mix asphalt (HMA) plant, with maximum production capacity of 250 tons per hour, fired with only natural gas, particulate emissions controlled with cyclone scrubber, air emissions of carbon monoxide (CO), nitrogen oxides (NO<sub>x</sub>), sulfur dioxide (SO<sub>2</sub>), and volatile organic compounds (VOCs) uncontrolled.</p> <p>MODIFICATION: P901 will be modified per the requirements of PTI 16-02427, to include recycled asphalt product (RAP) operation. Emission limitations will be updated based on factors from F.I.R.E 6.25.</p> <p>In order to maintain this facility as a minor source of all criteria pollutants, thus avoiding Title V and moderate nonattainment program requirements, the permittee requested federally enforceable asphalt production restrictions to limit the potential</p>	<p>OAC rule 3745-31-05(A)(3)</p>	<p>Stack emissions from burning natural gas shall not exceed the following limitations:</p> <p>100.0 lbs/hr of CO;          6.25 lbs/hr of NO<sub>x</sub>;          2.05 lbs/hr of VOCs; and          1.15 lbs/hr of SO<sub>2</sub>.</p> <p>Stack PE from burning any approved fuel in this permit shall not exceed 0.04 gr/dscf.</p> <p>Visible stack PE shall not exceed 20% opacity, as a 3-minute average.</p> <p>The permittee shall ensure that the baghouse is operated with sufficient air volume to minimize or eliminate visible fugitive emissions from the rotary dryer.</p> <p>No visible emissions of fugitive dust from the enclosures for the hot aggregate elevator, vibrating screens, and weigh hopper.</p> <p>Visible emissions of fugitive dust (from areas other than the enclosures for the hot aggregate elevator, vibrating screens, and</p>

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**Emissions Unit ID: P901**

to emit CO and PE below major source thresholds. With no other changes, this facility remains an unrestricted natural minor source of all other criteria pollutants and hazardous air pollutants (HAPs).

weigh hopper) shall not exceed 10% opacity, as a 3-minute average.

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 aggregate storage bins.

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

The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(B), OAC rule 3745-21-08(B), OAC rule 3745-23-06(B), and OAC rule 3745-31-05(C).

OAC rule 3745-17-07(A)(1)  
OAC rule 3745-17-11(B)(1)  
OAC rule 3745-17-07(B)  
OAC rule 3745-17-08  
OAC rule 3745-18-06(E)

The emission limitations specified by these rules are less stringent than the emission limitations established pursuant to OAC rule 3745-31-05(A)(3).

40 CFR Part 60, Subpart I

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

OAC rule 3745-21-07(B)  
OAC rule 3745-21-08(B)

See A.2.a below.

OAC rule 3745-23-06(B)

See A.2.b below.

OAC rule 3745-31-05(C)  
(to avoid moderate nonattainment program requirements);  
OAC rule 3745-35-07(B)

Emissions shall not exceed the following limitations (based upon rolling, 12-month summations of the monthly emission rates, per the

**Shalersville Asphalt Co**  
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**Facility ID: 1667050012**  
**Emissions Unit ID: P901**

(to avoid Title V program requirements)	federally enforceable asphalt production restrictions of B.4):	
	<u>Stack</u> (tons/yr)	<u>Fugitive</u> (tons/yr)
	CO: 99.00	0.63
	NO <sub>x</sub> : 6.19	--
	VOCs: 2.03	3.92
	SO <sub>2</sub> : 1.14	--
	PE: 34.65	17.72

**2. Additional Terms and Conditions**

**2.a** The permittee satisfies the “best available control techniques and operating practices” and “latest available control techniques and operating practices” required pursuant to OAC rule 3745-21-08 and 3745-21-07(B), respectively, by complying with the best available technology requirements of OAC rule 3745-31-05(A)(3).

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.

**2.b** The design of the emissions unit and technology associated with the current operating practices will satisfy the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-23-06.

On February 15, 2005, OAC rule 3745-23-06 was rescinded and therefore is no longer a 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 3745-23-06, the requirement to satisfy "latest available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

**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. The pressure drop across the wet scrubber serving this emissions unit shall be maintained with a minimum of 1.5 inches of water, a scrubbing liquid flow rate of 125 gallons per minute, and a water supply pressure within the range of 40 to 50 psig, while the emissions unit is in operation.
2. No fuels other than natural gas shall be burned in this emissions unit.
3. The maximum annual asphalt production for this emissions unit shall not exceed 495,000 tons per year, based upon a rolling, 12-month summation of the monthly asphalt production rates. To ensure enforceability during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed the production levels specified in the following table:

<u>Month(s)</u>	<u>Maximum Allowable Cumulative Tons of Hot Mix Asphalt Produced (tons)</u>
January through January	30,000
January through February	30,000
January through March	30,000
January through April	30,000
January through May	90,000
January through June	155,000
January through July	220,000
January through August	285,000
January through September	350,000
January through October	410,000
January through November	470,000
January through December	495,000

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual production limitation shall be based upon a rolling, 12-month summation of the monthly asphalt production rates.

4. The permittee may substitute recycled asphalt pavement (RAP) in the raw material feed mix in amounts not to exceed 50 percent of all aggregate materials.

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

1. The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across the wet scrubber, the water supply pressure, and the water flow rate 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 collect and record the following information each day:

- a. the water supply pressure, in psig, on a once/shift basis;
  - b. the water flow rate, in gpm, on a once/shift basis;
  - c. the pressure drop across the scrubber, in inches of water, on a once per shift basis; and
  - d. a log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.
2. The permittee shall maintain monthly records of the following information for this emissions unit:
- a. the monthly asphalt production rate, in tons;
  - b. during the first 12 calendar months of operation following the issuance of this permit, the monthly cumulative asphalt production rates, in tons;
  - c. after the first 12 calendar months of operation following the issuance of this permit, the rolling, 12-month summation of monthly asphalt production rates, in tons;
  - d. the monthly stack emissions, in tons, for CO, NO<sub>x</sub>, VOCs, SO<sub>2</sub> and PE (calculated in accordance with the methodology outlined in Section E.2 of this permit);
  - e. the monthly fugitive emissions, in tons, for CO, VOCs and PE (calculated in accordance with the methodology outlined in Section E.2 of this permit);
  - f. the rolling, 12-month stack emission rates, in tons, for CO, NO<sub>x</sub>, VOCs, PE, and SO<sub>2</sub>;
  - g. the rolling, 12-month fugitive emission rates, in tons, for CO, VOCs and PE;
  - h. the maximum weight percentage of RAP used for any mix.
3. The permittee shall perform daily visible emission checks, when the emissions unit is in operation and when weather conditions allow, for any visible particulate emissions from the wet scrubber serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible particulate emissions are observed, the permittee shall note the following in the operation 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 minimize or eliminate the visible emissions.
4. The permittee shall perform daily visible emission checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions from the hot aggregate elevator, vibrating screens, weigh hopper, the aggregate storage bins, the rotary drum and cold aggregate elevator/conveyor serving this emissions unit. The presence or absence of any visible fugitive 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 location and color of the visible emissions;
    - b. the cause of the visible particulate emissions;
    - c. the total duration of any visible emissions incident; and
    - d. any corrective actions taken to eliminate the visible emissions.
  5. While performing each burner tuning, the permittee shall record the results of the burner tuning using the *Burner Tuning Reporting Form for Asphalt Concrete Plants* form (as found in term F.1). An alternative form may be used upon approval of the Akron RAQMD.
  6. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

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

1. The permittee shall submit quarterly summary reports that include a log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation. The reports shall be submitted by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarter.
2. The permittee shall submit deviation (excursion) reports that identify all periods of time during which the following scrubber parameters were not maintained at or above the required levels contained in this permit:
  - a. the water supply pressure;
  - b. the scrubber water flow rate; and
  - c. the pressure drop across the scrubber.

These reports shall be due by the date described in Part I- General Terms and Condition of this permit under section (A)(2).

3. The permittee shall submit quarterly deviation (excursion) reports that identify the following for this emissions unit:
  - a. all exceedances of the RAP limitation of 50%, by weight;
  - b. all exceedances of the rolling, 12-month CO emission limitation of 99.0 tons (stack);
  - c. all exceedances of the rolling, 12-month CO emission limitation of 0.63 ton (fugitive);
  - d. all exceedances of the rolling, 12-month NO<sub>x</sub> emission limitation of 6.19 tons (stack);
  - e. all exceedances of the rolling, 12-month VOC emission limitation of 2.03 tons (stack);
  - f. all exceedances of the rolling, 12-month VOC emission limitation of 3.92 tons (fugitive);
  - g. all exceedances of the rolling, 12-month SO<sub>2</sub> emission limitation of 1.14 tons (stack);
  - h. all exceedances of the rolling, 12-month PE limitation of 34.65 tons (stack);
  - i. all exceedances of the rolling, 12-month PE limitation of 17.72 tons (fugitive);
  - j. all exceedances of the rolling, 12-month hot mix asphalt production limitation of 495,000 tons;
  - k. during the first 12 calendar months of operation following the issuance of this permit, all exceedances of the monthly cumulative hot mix asphalt production rates; and
  - l. after the first 12 calendar months of operation following the issuance of this permit, all exceedances of the rolling, 12-month hot mix asphalt production rate of 495,000 tons.

These reports shall be due by the date described in Part I- General Terms and Condition of this permit under section (A)(2).

4. The permittee shall submit semiannual written deviation (excursion) reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit, and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Akron RAQMD by January 31 and July 31 of each year and shall cover the previous 6-month period.
5. The permittee shall submit semiannual written deviation (excursion) reports that (a) identify all days during which any visible fugitive particulate emissions were observed from the hot

aggregate elevator, vibrating screens, weigh hopper, the aggregate storage bins, the rotary drum and cold aggregate elevator/conveyor serving this emissions unit, and (b) describe any corrective actions taken to eliminate the visible fugitive particulate emissions. These reports shall be submitted to the Akron RAQMD by January 31 and July 31 of each year and shall cover the previous 6-month period.

6. The permittee shall submit a copy of the *Burner Tuning Reporting Form for Asphalt Concrete Plants* form to the Akron RAQMD to summarize the results of each burner tuning procedure. These reports shall be submitted to the Akron RAQMD by January 31 of each year and shall cover the previous calendar year.
7. The permittee shall submit deviation reports that identify each day during when the a fuel other than natural gas was burned in this emission unit. Each report shall be submitted within 30 days after the deviation occurs.
8. Pursuant to NSPS 40 CFR Part 60, Subpart I, the source owner/operator is hereby advised of the requirement to report, if not previously done so, the following at the appropriate times:
  - a. Construction date (no later than 30 days after such date);
  - b. Actual start-up date (within 15 days after such date); and
  - c. Date of performance testing (If required, at least 30 days prior to testing).

Reports are to be sent to the Akron RAQMD responsible for the permitting of the facility.

## **E. Testing Requirements**

1. Within 180 days prior to the expiration of the permit to operate (PTO), the permittee shall conduct, or have conducted, emission testing in accordance with the following requirements:
  - a. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for PE, VOC, CO, NO<sub>x</sub> and SO<sub>2</sub>, or, if necessary, to establish site-specific, potential stack emissions for PE, VOC, CO, NO<sub>x</sub> and SO<sub>2</sub>.
  - b. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rates for PE, VOC, CO, NO<sub>x</sub> and SO<sub>2</sub>, or, if necessary, to establish site-specific, potential stack emissions for PE, VOC, CO, NO<sub>x</sub> and SO<sub>2</sub>:

PE, Methods 1-5 of 40 CFR Part 60, Appendix A.

NO<sub>x</sub>, Methods 1-4 and 7 or 7E of 40 CFR Part 60, Appendix A.

SO<sub>2</sub>, Methods 1-4 and 6 or 6C of 40 CFR Part 60, Appendix A

CO, Methods 1-4 and 10 of 40 CFR Part 60, Appendix A

VOC, Methods 1-4 and 25 and/or 18 of 40 CFR Part 60, Appendix A

The VOC pounds per hour emission rate observed during the emissions test shall be calculated in accordance with OAC 3745-21-10(C)(7) where the average

molecular weight of the VOC emissions equals 16. i.e., the VOC as carbon emission rate observed during testing shall be converted to the appropriate units by multiplying the VOC as carbon emission rate observed during testing by 16 and dividing by 12. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

- c. The test(s) shall be conducted while this emissions unit is operating at or near its maximum capacity and burning natural gas for PE, VOC, CO, NO<sub>x</sub>, and SO<sub>2</sub>, and employing RAP to verify VOC emissions, unless otherwise specified or approved by the Akron RAQMD.

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

Personnel from the Akron RAQMD 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 Akron RAQMD 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 Akron RAQMD.

2. Compliance with the emission limitations in section A.1 of these terms and conditions shall be determined in accordance with the following methods:
  - a. Emission Limitations: Stack emissions from burning natural gas shall not exceed the following limitations:
    - 100.00 lbs/hr of CO;
    - 6.25 lbs/hr of NO<sub>x</sub>;
    - 2.05 lbs/hr of VOCs;
    - 1.15 lbs/hr of SO<sub>2</sub>; and
    - 0.04 gr/dscf of PE.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly allowable CO, NO<sub>x</sub>, VOC and SO<sub>2</sub> emission limitations and the gr PE/dscf limitation based on the results of emission testing conducted in accordance with the methods outlined in Section E.1.b of this permit.

The hourly allowable emission limitations for CO, NO<sub>x</sub>, VOC and SO<sub>2</sub> were established by multiplying the appropriate emission factor for each pollutant (see below) by the maximum hourly hot mix asphalt production rate (250 tons/hr).

F.I.R.E 6.25 Emission Factors:

0.40# CO per ton of asphaltic concrete produced  
0.025# NO<sub>x</sub> per ton of asphaltic concrete produced  
0.0082# VOC per ton of asphaltic concrete produced  
0.0046# SO<sub>2</sub> per ton of asphaltic concrete produced

- b. Emissions Limitation: Stack PE shall not exceed 34.65 tons per rolling, 12-month period, when burning any approved fuel in this permit.

Applicable Compliance Method:

Compliance with the annual allowable PE limitation shall be demonstrated by multiplying the emission factor (lbs PE/ton of asphalt produced, based on the results of the most recent emission testing that demonstrated the emissions unit was in compliance) by the actual rolling, 12-month hot mix asphalt production rate, from Section C.3 of this permit, and then dividing by 2000 lbs/ton.

- c. Emission Limitation: Stack VOC emissions shall not exceed 2.03 tons per rolling, 12-month period.

Applicable Compliance Method:

Compliance with the annual allowable VOC emission limitation shall be demonstrated by multiplying the emission factor (lbs VOC/ton of asphalt produced, based on the results of the most recent emission testing that demonstrated the emissions unit was in compliance) by the actual rolling, 12-month hot mix asphalt production rate, from Section C.3 of this permit, and then dividing by 2000 lbs/ton.

- d. Emission Limitation: Stack CO emissions shall not exceed 99.00 tons per rolling, 12-month period.

Applicable Compliance Method:

Compliance with the annual allowable CO emission limitation shall be demonstrated by multiplying the emission factor of 0.40 lb CO/ton of HMA produced [F.I.R.E. 6.25 program] by the actual rolling, 12-month hot mix asphalt production rate, from Section C.3 of this permit, and then dividing by 2000 lbs/ton.

- e. Emission Limitation: Stack SO<sub>2</sub> emissions shall not exceed 1.14 tons per rolling, 12-month period.

Applicable Compliance Method: Compliance with the annual allowable SO<sub>2</sub> emission limitation shall be demonstrated by multiplying the emission factor of 0.0046 lb SO<sub>2</sub>/ton of HMA [F.I.R.E. 6.25 program] by the actual rolling, 12-month hot mix asphalt production rate, from Section C.3 of this permit, and then dividing by 2000 lbs/ton.

- f. Emission Limitation: Stack NO<sub>x</sub> emissions shall not exceed 6.19 tons per rolling, 12-month period.

Applicable Compliance Method: Compliance with the annual allowable emission limitation shall be determined by multiplying the emission factor of 0.025 lb NO<sub>x</sub>/ton of HMA [F.I.R.E. 6.25 program] by the actual rolling, 12-month hot mix asphalt production rate, from Section C.3 of this permit, and then dividing by 2000 lbs/ton.

- g. Emission Limitation: Visible particulate emissions from the stack shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method: Compliance shall be determined using Method 9 as set forth in 40 CFR Part 60 Appendix A, as such appendix existed on July 1, 2002 and the modifications listed in paragraphs (B)(3)(a) and (B)(3)(b) of OAC rule 3745-17-03.

- h. Emission Limitation: No visible emissions of fugitive dust from the enclosures for the hot aggregate elevator, vibrating screens, the rotary drum and weigh hopper.

Applicable Compliance Method: Compliance shall be determined in accordance with Test Method 22 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, 2002, and the modifications listed in paragraphs (B)(4)(a) through (B)(4)(d) of OAC rule 3745-17-03.

- i. Emission Limitation: Visible emissions of fugitive dust (from areas other than the enclosures for the hot aggregate elevator, vibrating screens, the rotary drum and weigh hopper) shall be less than or equal to 10% opacity, as a 3-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, 2002, and the modifications listed in paragraphs (B)(3)(a) and (B)(3)(b) of OAC rule 3745-17-03.

- j. Emission Limitation: Fugitive PE from the emissions unit shall not exceed 17.27 tons per rolling, 12-month period.

Applicable Compliance Method:

The annual allowable PE limitation above shall be determined as follows:

$$E = [A(S + TN + C) + P(L + F)](1 \text{ ton}/2000 \text{ pounds})$$

Where:

$$E = 17.72 \text{ tons of fugitive PE per rolling, 12-month period}$$

Cold Side Material Handling Operations:

A = 478,000 tons of sand/aggregate per rolling, 12-month period [federally enforceable production restriction, excluding the asphalt cement];

S = 0.025 pound/ton of production [screening emissions];

T = 0.0030 pound/ton of production/transfer point [emissions per material transfer point];

N = 16 [the number of material transfer points]; and

C = 0.000016 pound/ton of production [cold feed loading emissions].

Hot Side Load-out and Silo Filling Operations:

P = 495,000 tons of hot mix asphalt per rolling, 12-month period [federally enforceable production restriction];

L = 0.0005194 pound/ton of production [load-out emissions]; and

F = 0.000584 pound/ton of production [silo filling emissions].

The emission factors above are taken from AP-42, 5th Edition, Table 11.19.2-2 (08/04), for the cold side material handling operations, and Table 11.1-14 (03/04) for the hot side load-out and silo filling operations.

k. Emission Limitations:

0.63 ton fugitive CO emissions per rolling, 12-month period.  
 3.92 tons fugitive VOC emissions per rolling, 12-month period.

Applicable Compliance Method:

The annual allowable VOC and CO emission limitations above shall be determined as follows:

Fugitive emissions from the hot side (hot mix asphalt) load-out and silo filling) are calculated as follows:

Asphalt plant silo filling and plant load-out emissions from AP-42, Table 11.1-14 dated 3/2004

Known:

V = -0.5 Asphalt volatility factor (default) T = 325 HMA mix temp (F) (default)

For silo filling, 1.4% of TOC is not VOC AP-42 Table 11.1-16 dated 3/2004  
 For plant load-out, 7.3% of TOC is not VOC AP-42 Table 11.1-16 dated 3/2004

<u>Activity</u>	<u>Pollutant</u>	<u>Predictive Emission Factor Equation, lb/ton</u>
Silo filling	PE	$EF=0.000332+0.00105(-V)e^{((0.0251)(T+460)-20.43)}$
Load-out	PE	$EF=0.000181+0.00141(-V)e^{((0.0251)(T+460)-20.43)}$
Silo filling	VOC	$EF= [0.0504(-V)e^{((0.0251)(T+460)-20.43)}] \times (1-0.014)$
Load-out	VOC	$EF= [0.0172(-V)e^{((0.0251)(T+460)-20.43)}] \times (1-0.073)$
Silo filling	CO	$EF=0.00488(-V)e^{((0.0251)(T+460)-20.43)}$
Load-out	CO	$EF=0.00558(-V)e^{((0.0251)(T+460)-20.43)}$

Based on the above information, the emission factors and emissions are as follows.

<u>Activity</u>	<u>Pollutant</u>	<u>lb/ton</u>	<u>tons/yr (at 495,000 tons/yr production)</u>
Silo filling	PE	5.86 x 10 <sup>-4</sup>	0.15
Load-out	PE	5.22 x 10 <sup>-4</sup>	0.13
Silo filling	VOC	1.20 x 10 <sup>-2</sup>	2.97
Load-out	VOC	3.86 x 10 <sup>-3</sup>	0.96
Silo filling	CO	1.18 x 10 <sup>-3</sup>	0.29

Load-out	CO	1.35 x 10 <sup>-3</sup>	0.33
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### 3. Burner Tuning

#### a. Introduction

The permittee is required to conduct periodic tuning of the asphalt plant burner. The purpose of this tuning is to ensure that the burner is adjusted properly so that air pollution emissions remain in compliance with allowable emissions rates and are minimized.

- b. Qualifications for Burner Tuning Technicians who conduct the burner tuning must be qualified to perform the expected tasks. The permittee is required to provide training to the technicians who perform the burner tuning procedure. Technicians who are qualified shall, at a minimum, have passed manufacturer's training concerning burner tuning, or have been trained by someone who has completed the manufacturer's training concerning burner tuning.

#### c. Portable Monitor Requirements

The permittee shall properly operate and maintain portable device(s) to monitor the concentration of NO<sub>x</sub>, VOC, O<sub>2</sub> and CO in the stack exhaust gases from this emissions unit. The monitor(s) shall be capable of measuring the expected concentrations of the measured gases. The monitoring equipment shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall maintain records of each portable monitoring device's calibration.

#### d. Burner Tuning Procedure

The first steps concerning burner tuning involve setting the pollutant baseline levels (concentrations) utilizing the portable monitor. These baselines shall be set during the initial U.S. EPA approved emissions testing that demonstrated the emissions unit was in compliance with all applicable emissions limitations as described in term E.1.a. The baselines shall be determined for VOC, NO<sub>x</sub>, and CO. Sampling should measure the exhaust gas values exiting the baghouse. The duration of each sample shall follow the portable monitor manufacture's recommendations. Record these values on the *Burner Tuning Reporting Form for Asphalt Concrete Plants* form (as found in Section F.2) in the "Recent Stack Test Basis Values" column.

Once the pollutant baseline levels are set, the burner shall be next tuned based on the frequency described in Section E.2.e. The general procedure for tuning the burner involves the following steps:

- i. Review the plant operations to ensure the plant is operating normally.
- ii. Confirm that the portable monitor is calibrated per the manufacture's specifications.
- iii. Using the calibrated monitor and the monitor manufacturer's recommended sampling duration, measure the stack exhaust gas values for VOC, NO<sub>x</sub>, and CO. These measurements shall be taken at the same location as the location where the baseline samples were taken. Record the values in the "Pre Tuning" results column on the *Burner Tuning Reporting Form for Asphalt Concrete Plants* form.
- iv. Compare the measured stack exhaust gas values with the pollutant baseline values. If all of the measured stack exhaust gas values are equal to or less than 115 percent of the pollutant baseline values, then it is not necessary to tune the burner. Go on to Section v. below.

The permittee shall have the burners tuned within two calendar weeks of any measured stack exhaust values greater than 115 percent of the baseline values. Make any necessary adjustments and repairs. Repeat Sections iii. and iv. until the measured stack exhaust gas values are equal to or less than 115 percent of the pollutant baseline values.

- v. Once all of the measured stack exhaust gas values are within the 115 per cent of the pollutant baseline values, record the measured stack exhaust gas values in the "Post Tuning" results column on the *Burner Tuning Reporting Form for Asphalt Concrete Plants* form.
- vi. By January 31st of each year, submit a copy of all *Burner Tuning Reporting Form for Asphalt Concrete Plants* forms produced during the past calendar year to the Ohio EPA District Office or local air agency responsible for the permitting of the facility.

e. Burner Tuning Frequency

The permittee shall conduct the burner tuning procedure within 20 production days after commencement of the production season in the State of Ohio. The permittee shall conduct another burner tuning procedure within 10 production days before or after June 1st of each year and within 10 production days before or after September 1st of each year. For purposes of this permit, the production season is defined as the time period between the date the first ton of asphalt is produced and the date that the last ton of asphalt is produced during the same calendar year. A burner tuning is not required if the production season ends prior to the associated tuning due date.

**Shalersville Asphalt Co**  
**PTI Application: 16-02427**  
**Issued: To be entered upon final issuance**

**Facility ID: 1667050012**  
**Emissions Unit ID: P901**

In addition to the burner tuning procedure required above, the permittee shall conduct the burner tuning procedure within 20 production days from the date the facility switches to a fuel that is different than the fuel burned during the initial emissions tests that establish the pollutant baseline levels or the fuel burned during the most recent burner tuning procedure, whichever is later.

**F. Miscellaneous Requirements**

1. Modeling to demonstrate compliance with the Ohio EPA's "Air Toxic Policy" was not necessary because the emissions unit's maximum annual emissions for each toxic compound will be less than 1.0 ton. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any pollutant that has a listed TLV to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new permit to install.
  
2. Burner Tuning Form:

BURNER TUNING REPORTING FORM FOR ASPHALT CONCRETE PLANTS	
Facility ID:	Tuning Date:
Legal Name:	Other Company Name (if different than legal name):
Mailing Address:	Other Company Site Address: (if different than mailing address):
City, State, Zip Code:	Other Company City, County, Zip Code:
Site Contact Person:	Site Contact Telephone Number:
Site Contact Title:	Site Contact Fax Number:
Name of company performing tuning:	Name of company performing emission monitoring:
Type of plant (ie: batch, drum mix, etc.):	Calibration date for analyzers:

Reason for Tuning:  Season Initial Tuning  June Tuning  September Tuning  Fuel Switch  Other (describe)

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Fuel employed during tuning:  Natural Gas  #2 Fuel Oil  #4 Fuel Oil  Used Oil  Other (describe)

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Tuning Results:

**Shalersville Asphalt Co**  
**PTI Application: 16-02427**  
**Issued: To be entered upon final issuance**

**Facility ID: 1667050012**  
**Emissions Unit ID: P901**

Parameter	Recent Stack Test Pollutant Baseline Levels <sup>1</sup>	Results	
		Pre Tuning	Post Tuning <sup>3</sup>
Fuel flow to the burner (gallon/hr) (for fuel oil and on-spec used oil)			
Fuel pressure (psi)			
For burners that require compressed air for proper operation, pressure at the burner (psi)			
Carbon Monoxide (CO) concentrations (ppm) <sup>2</sup>			
NOx concentrations (ppm) <sup>2</sup>			
Oxygen concentrations (%) <sup>2</sup>			
Asphalt Production (tons/hr)			

<sup>1</sup>These values are based on the results of the most recent Ohio EPA approved emissions test.

<sup>2</sup> Specify whether on a dry or wet basis.

<sup>3</sup> If the burner did not require adjusting, please record N/A in the post tuning column.

Describe in detail a list of adjustments and/or repairs made to bring the operating parameters into conformance with the manufacturers specifications. Use additional paper if necessary.

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Authorized Signature: This signature shall constitute personal affirmation that all statements or assertions of fact made in this form are true and complete, comply fully with applicable state requirements, and shall subject the signatory to liability under applicable state laws forbidding false or misleading statements.

Name of Official (Printed or Typed):	Title of Official and Phone Number:
Signature of Official:	Date: