



**Environmental  
Protection Agency**

Ted Strickland, Governor  
Lee Fisher, Lt. Governor  
Chris Korleski, Director

5/21/2010

DAVID RONYAK  
Shalersville Asphalt Co.  
PO BOX 540  
BURTON, OH 44021

RE: FINAL AIR POLLUTION PERMIT-TO-INSTALL AND OPERATE  
Facility ID: 1667050012  
Permit Number: P0105994  
Permit Type: OAC Chapter 3745-31 Modification  
County: Portage

Certified Mail

No	TOXIC REVIEW
No	PSD
Yes	SYNTHETIC MINOR TO AVOID MAJOR NSR
No	CEMS
No	MACT
Yes	NSPS
No	NESHAPS
No	NETTING
No	MAJOR NON-ATTAINMENT
No	MODELING SUBMITTED
Yes	SYNTHETIC MINOR TO AVOID TITLE V
Yes	FEDERALLY ENFORCABLE PTIO (FEPTIO)

Dear Permit Holder:

Enclosed please find a final Air Pollution Permit-to-Install and Operate (PTIO) which will allow you to install, modify, and/or operate the described emissions unit(s) in the manner indicated in the permit. Because this permit contains conditions and restrictions, please read it very carefully. Please complete a survey at [www.epa.ohio.gov/dapc/permitsurvey.aspx](http://www.epa.ohio.gov/dapc/permitsurvey.aspx) and give us feedback on your permitting experience. We value your opinion.

The issuance of this PTI is a final action of the Director and may be appealed to the Environmental Review Appeals Commission pursuant to Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. The appeal must be filed with the Commission within thirty (30) days after notice of the Director's action. The appeal must be accompanied by a filing fee of \$70.00, made payable to "Ohio Treasurer Kevin Boyce," which the Commission, in its discretion, may reduce if by affidavit you demonstrate that payment of the full amount of the fee would cause extreme hardship. Notice of the filing of the appeal shall be filed with the Director within three (3) days of filing with the Commission. Ohio EPA requests that a copy of the appeal be served upon the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission  
309 South Fourth Street, Room 222  
Columbus, OH 43215

If you have any questions, please contact Akron Regional Air Quality Management District at (330)375-2480 or the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469. This permit can be accessed electronically on the DAPC Web page, [www.epa.ohio.gov/dapc](http://www.epa.ohio.gov/dapc), by clicking the "Issued Air Pollution Control Permits" link.

Sincerely,

*Michael W. Ahern*  
Michael W. Ahern, Manager  
Permit Issuance and Data Management Section, DAPC

Cc: ARAQMD





**FINAL**

**Division of Air Pollution Control  
Permit-to-Install and Operate  
for  
Shalersville Asphalt Co.**

Facility ID: 1667050012  
Permit Number: P0105994  
Permit Type: OAC Chapter 3745-31 Modification  
Issued: 5/21/2010  
Effective: 5/21/2010  
Expiration: 5/21/2015





Division of Air Pollution Control
Permit-to-Install and Operate
for
Shalersville Asphalt Co.

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## Authorization

Facility ID: 1667050012  
Application Number(s): A0038889  
Permit Number: P0105994  
Permit Description: Installation of a new rotary mixer, that injects liquid asphalt into the aggregate material, replaces a screen system that runs dry. Modification of operations to allow the use of slag in the asphalt mix with a corresponding increase in the allowable sulfur dioxide emissions limit during slag usage.  
Permit Type: OAC Chapter 3745-31 Modification  
Permit Fee: \$625.00  
Issue Date: 5/21/2010  
Effective Date: 5/21/2010  
Expiration Date: 5/21/2015  
Permit Evaluation Report (PER) Annual Date: Jan 1 - Dec 31, Due Feb 15

This document constitutes issuance to:

Shalersville Asphalt Co.  
3486 FROST RD  
MANTUA, OH 44255

of a Permit-to-Install and Operate for the emissions unit(s) identified on the following page.

Ohio EPA District Office or local air agency responsible for processing and administering your permit:

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

The above named entity is hereby granted this Permit-to-Install and Operate for the air contaminant source(s) (emissions unit(s)) listed in this section 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 described emissions unit(s) will operate in compliance with applicable State and federal laws and regulations.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

  
Chris Korleski  
Director



## Authorization (continued)

Permit Number: P0105994  
Permit Description: Installation of a new rotary mixer, that injects liquid asphalt into the aggregate material, replaces a screen system that runs dry. Modification of operations to allow the use of slag in the asphalt mix with a corresponding increase in the allowable sulfur dioxide emissions limit during slag usage.

Permits for the following Emissions Unit(s) or groups of Emissions Units are in this document as indicated below:

<b>Emissions Unit ID:</b>	<b>P901</b>
Company Equipment ID:	Batching Plant #1
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable

## **A. Standard Terms and Conditions**

**1. What does this permit-to-install and operate ("PTIO") allow me to do?**

This permit allows you to install and operate the emissions unit(s) identified in this PTIO. You must install and operate the unit(s) in accordance with the application you submitted and all the terms and conditions contained in this PTIO, including emission limits and those terms that ensure compliance with the emission limits (for example, operating, recordkeeping and monitoring requirements).

**2. Who is responsible for complying with this permit?**

The person identified on the "Authorization" page, above, is responsible for complying with this permit until the permit is revoked, terminated, or transferred. "Person" means a person, firm, corporation, association, or partnership. The words "you," "your," or "permittee" refer to the "person" identified on the "Authorization" page above.

The permit applies only to the emissions unit(s) identified in the permit. If you install or modify any other equipment that requires an air permit, you must apply for an additional PTIO(s) for these sources.

**3. What records must I keep under this permit?**

You must keep all records required by this permit, including monitoring data, test results, strip-chart recordings, calibration data, maintenance records, and any other record required by this permit for five years from the date the record was created. You can keep these records electronically, provided they can be made available to Ohio EPA during an inspection at the facility. Failure to make requested records available to Ohio EPA upon request is a violation of this permit requirement.

**4. What are my permit fees and when do I pay them?**

There are two fees associated with permitted air contaminant sources in Ohio:

- PTIO fee. This one-time fee is based on a fee schedule in accordance with Ohio Revised Code (ORC) section 3745.11, or based on a time and materials charge for permit application review and permit processing if required by the Director.

You will be sent an invoice for this fee after you receive this PTIO and payment is due within 30 days of the invoice date. You are required to pay the fee for this PTIO even if you do not install or modify your operations as authorized by this permit.

- Annual emissions fee. Ohio EPA will assess a separate fee based on the total annual emissions from your facility. You self-report your emissions in accordance with Ohio Administrative Code (OAC) Chapter 3745-78. This fee assessed is based on a fee schedule in ORC section 3745.11 and funds Ohio EPA's permit compliance oversight activities. Unless otherwise specified, facilities subject to one or more synthetic minor restrictions must use Ohio EPA's "Air Services" to submit annual emissions associated with this permit requirement. Ohio EPA will notify you when it is time to report your emissions and to pay your annual emission fees.

**5. When does my PTIO expire, and when do I need to submit my renewal application?**

This permit expires on the date identified at the beginning of this permit document (see "Authorization" page above) and you must submit a renewal application to renew the permit. Ohio EPA will send a renewal notice to you approximately six months prior to the expiration date of this permit. However, it is very important that you submit a complete renewal permit application (postmarked prior to expiration of this permit) even if you do not receive the renewal notice.

If a complete renewal application is submitted before the expiration date, Ohio EPA considers this a timely application for purposes of ORC section 119.06, and you are authorized to continue operating the emissions unit(s) covered by this permit beyond the expiration date of this permit until final action is taken by Ohio EPA on the renewal application.

**6. What happens to this permit if my project is delayed or I do not install or modify my source?**

This PTIO expires 18 months after the issue date identified on the "Authorization" page above unless otherwise specified if you have not (1) started constructing the new or modified emission sources identified in this permit, or (2) entered into a binding contract to undertake such construction. This deadline can be extended by up to 12 months, provided you apply to Ohio EPA for this extension within a reasonable time before the 18-month period has ended and you can show good cause for any such extension.

**7. What reports must I submit under this permit?**

An annual permit evaluation report (PER) is required in addition to any malfunction reporting required by OAC rule 3745-15-06 or other specific rule-based reporting requirement identified in this permit. Your PER due date is identified in the Authorization section of this permit.

**8. If I am required to obtain a Title V operating permit in the future, what happens to the operating provisions and PER obligations under this permit?**

If you are required to obtain a Title V permit under OAC Chapter 3745-77 in the future, the permit-to-operate portion of this permit will be superseded by the issued Title V permit. From the effective date of the Title V permit forward, this PTIO will effectively become a PTI (permit-to-install) in accordance with OAC rule 3745-31-02(B). The following terms and conditions will no longer be applicable after issuance of the Title V permit: Section B, Term 1.b) and Section C, for each emissions unit, Term a)(2).

The PER requirements in this permit remain effective until the date the Title V permit is issued and is effective, and cease to apply after the effective date of the Title V permit. The final PER obligation will cover operations up to the effective date of the Title V permit and must be submitted on or before the submission deadline identified in this permit on the last day prior to the effective date of the Title V permit.

**9. What are my obligations when I perform scheduled maintenance on air pollution control equipment?**

You must perform scheduled maintenance of air pollution control equipment in accordance with OAC rule 3745-15-06(A). If scheduled maintenance requires shutting down or bypassing any air pollution control equipment, you must also shut down the emissions unit(s) served by the air pollution control equipment during maintenance, unless the conditions of OAC rule 3745-15-06(A)(3) are met. Any emissions that exceed permitted amount(s) under this permit (unless specifically exempted by rule) must be reported as deviations in the annual permit evaluation report (PER), including nonexempt excess emissions that occur during approved scheduled maintenance.

**10. Do I have to report malfunctions of emissions units or air pollution control equipment? If so, how must I report?**

If you have a reportable malfunction of any emissions unit(s) or any associated air pollution control system, you must report this to the Akron Regional Air Quality Management District in accordance with OAC rule 3745-15-06(B). Malfunctions that must be reported are those that result in emissions that exceed permitted emission levels. It is your responsibility to evaluate control equipment breakdowns and operational upsets to determine if a reportable malfunction has occurred.

If you have a malfunction, but determine that it is not a reportable malfunction under OAC rule 3745-15-06(B), it is recommended that you maintain records associated with control equipment breakdown or process upsets. Although it is not a requirement of this permit, Ohio EPA recommends that you maintain records for non-reportable malfunctions.

**11. Can Ohio EPA or my local air agency inspect the facility where the emission unit(s) is/are located?**

Yes. Under Ohio law, the Director or his authorized representative may inspect the facility, conduct tests, examine records or reports to determine compliance with air pollution laws and regulations and the terms and conditions of this permit. You must provide, within a reasonable time, any information Ohio EPA requests either verbally or in writing.

**12. What happens if one or more emissions units operated under this permit is/are shut down permanently?**

Ohio EPA can terminate the permit terms associated with any permanently shut down emissions unit. "Shut down" means the emissions unit has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31.

You should notify Ohio EPA of any emissions unit that is permanently shut down by submitting<sup>1</sup> a certification that identifies the date on which the emissions unit was permanently shut down. The certification must be submitted by an authorized official from the facility. You cannot continue to operate an emissions unit once the certification has been submitted to Ohio EPA by the authorized official.

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<sup>1</sup> Permittees that use Ohio EPA's "Air Services" can mark the affected emissions unit(s) as "permanently shutdown" in the facility profile along with the date the emissions unit(s) was permanently removed and/or disabled. Submitting the facility profile update will constitute notifying of the permanent shutdown of the affected emissions unit(s).

You must comply with all recordkeeping and reporting for any permanently shut down emissions unit in accordance with the provisions of the permit, regulations or laws that were enforceable during the period of operation, such as the requirement to submit a PER, air fee emission report, or malfunction report. You must also keep all records relating to any permanently shutdown emissions unit, generated while the emissions unit was in operation, for at least five years from the date the record was generated.

Again, you cannot resume operation of any emissions unit certified by the authorized official as being permanently shut down without first applying for and obtaining a permit pursuant to OAC Chapter 3745-31.

**13. Can I transfer this permit to a new owner or operator?**

You can transfer this permit to a new owner or operator. If you transfer the permit, you must follow the procedures in OAC Chapter 3745-31, including notifying Ohio EPA or the local air agency of the change in ownership or operator. Any transferee of this permit must assume the responsibilities of the transferor permit holder.

**14. Does compliance with this permit constitute compliance with OAC rule 3745-15-07, "air pollution nuisance"?**

This permit and OAC rule 3745-15-07 prohibit operation of the air contaminant source(s) regulated under this permit in a manner that causes a nuisance. Ohio EPA can require additional controls or modification of the requirements of this permit through enforcement orders or judicial enforcement action if, upon investigation, Ohio EPA determines existing operations are causing a nuisance.

**15. What happens if a portion of this permit is determined to be invalid?**

If a portion of this permit is determined to be invalid, the remainder of the terms and conditions remain valid and enforceable. The exception is where the enforceability of terms and conditions are dependent on the term or condition that was declared invalid.

## **B. Facility-Wide Terms and Conditions**

1. This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).
  - a) For the purpose of a permit-to-install document, the facility-wide terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
    - (1) None.
  - b) For the purpose of a permit-to-operate document, the facility-wide terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
    - (1) None.

## **C. Emissions Unit Terms and Conditions**



1. P901, Asphalt Batching Plant #1

Operations, Property and/or Equipment Description:

Existing batch-mix hot mix asphalt (HMA) plant (installed 1967), 250 tons per hour maximum asphalt production capacity, rotary dryer fired with only natural gas, particulate emissions controlled with a cyclone/baghouse. This permit supersedes Permit-to-Install 16-02427 issued April 11, 2006, and all other previously air permits issued for this emissions unit, and allows, per the requirements of OAC Chapter 3745-31, modification of the plant with the installation of a new rotary mixer, that injects liquid asphalt into the aggregate material, to replace a screen system that runs dry, and modification of operations to allow the use of slag in the asphalt mix with a corresponding higher allowable sulfur dioxide emissions limit during slag usage.

a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

(1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

a. g)(2).

(2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

a. b)(1)b, c)(1), c)(7), d)(1), d)(2), e)(1), f)(1)c, f)(1)d, f)(1)e, f)(1)f, and f)(1)g.

b) Applicable Emissions Limitations and/or Control Requirements

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

Table with 2 columns: Applicable Rules/Requirements and Applicable Emissions Limitations/Control Measures. Row 1: a. OAC rule 3745-31-05(A)(3) | Stack Emissions: Visible particulate emissions (PE) shall not exceed 20 percent opacity, as a 6-minute average. Nitrogen Oxides (NOx) emissions while burning natural gas shall not exceed 0.029 pound per ton of asphalt produced. Sulfur dioxide (SO2) emissions while burning natural gas shall not exceed 0.011 pound per ton of asphalt produced.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		<p>SO<sub>2</sub> emissions while employing slag in the mix shall not exceed 0.53 pound per ton of slag applied in addition to the emissions generated while burning natural gas.</p> <p>Carbon monoxide (CO) emissions while burning any approved fuel shall not exceed 0.40 pound per ton of asphalt produced.</p> <p>Volatile organic compound (VOC) emissions while burning any approved fuel shall not exceed 0.015 pound per ton of asphalt produced.</p> <p>Fugitive Emissions</p> <p>Visible emissions of fugitive dust shall be less than or equal to 10 percent opacity, as a 6-minute average.</p> <p>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.</p> <p>The aggregate loaded into the cold aggregate bins shall have moisture content sufficient to minimize or eliminate visible emissions of fugitive dust from conveyors and all transfer points to the dryer.</p> <p>There shall be no visible emissions of fugitive dust from the enclosures for the rotary drum and the hot mix asphalt elevator.</p> <p>The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-05(D) and 3745-21-08(B) and 40 CFR Part 60, Subpart I.</p>
b.	OAC rule 3745-31-05(D) (Synthetic minor to avoid Title V)	<p>Stack Emissions</p> <p>NO<sub>x</sub> emissions shall not exceed 7.18</p>



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		<p>tons per rolling, 12-month period.</p> <p>SO<sub>2</sub> emissions shall not exceed 21.6 tons per rolling, 12-month period.</p> <p>CO emissions shall not exceed 99.0 tons per rolling, 12-month period.</p> <p>VOC emissions shall not exceed 3.71 tons per rolling, 12-month period.</p> <p>PE shall not exceed 6.19 tons per rolling, 12-month period.</p> <p>Fugitive Emissions</p> <p>Asphalt Load Out Emissions shall not exceed 0.33 ton CO per rolling 12-month period, 0.13 ton PE per rolling 12-month period and 0.96 ton of VOC per rolling 12-month period.</p> <p>Asphalt Silo Filling Emissions shall not exceed 0.29 ton CO per rolling, 12-month period, 0.14 ton PE per rolling 12-month period, and 2.97 tons VOC per rolling 12-month period.</p> <p>Cold End Emissions associated with the cold aggregate, sand and RAP loading and transfer operations shall not exceed 2.5 tons of fugitive dust per rolling 12-month period.</p>
c.	OAC rule 3745-21-08(B)	See b)(2)a.
d.	40 CFR Part 60, Subpart I	PE shall not exceed 0.04 gr/dscf. See b)(2)b.
e.	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 emissions limitations specified by these rules are less stringent than the emission limitations established pursuant to OAC rule 3745-31-05(A)(3) and from 40 CFR Part 60, Subpart I.

(2) Additional Terms and Conditions

- a. In accordance with 40 CFR Part 60 Subpart I 60.90(a) and (b), this emissions unit is a hot mix asphalt plant that has commenced construction or modification after June 11, 1973, and is subject to the emissions limitations/control measures specified in 40 CFR Part 60 Subpart I.

## c) Operational Restrictions

- (1) The permittee has requested a federally enforceable limitation on asphalt produced in order to restrict the federally enforceable potential to emit. The amount of asphalt produced is restricted in two ways:
  - a. The total amount of asphalt produced using any fuel is limited to 495,000 tons per rolling, 12-month period. The permittee has sufficient records to demonstrate compliance with the asphalt production limitation upon permit issuance.
  - b. The amount of asphalt produced and the SO<sub>2</sub> emissions are restricted by the following equation:
$$((0.011)*(a) + (0.53)*(b))/2000 \leq 21.6 \text{ tons per rolling, 12-month period}$$

*Where:*

a = tons asphalt produced per rolling, 12-month period;

b = tons of slag employed in the aggregate mix per rolling, 12-month period.

\* = factors may be revised based upon Ohio EPA validated emissions testing and shall be revised if emissions testing results in higher emissions.
- (2) The permittee shall operate and maintain the fuel burner in accordance with the manufacturer's recommendations to ensure efficient combustion of the fuel(s) and to ensure compliance with the applicable emission limitations for CO and NO<sub>x</sub>.
- (3) The permittee may substitute reclaimed asphalt pavement (RAP) and/or asphalt shingles in amounts not to exceed 75 percent of each asphalt mix produced. The permittee may not substitute materials such as rubber, etc., without prior approval from Ohio EPA.
- (4) Asphalt shingles removed from buildings (tear-off material) may be used but only if it has been determined that they do not contain asbestos. Verification that the shingles do not contain asbestos can either be done by actual testing of a representative sample of the shingles, or by verification from the shingle manufacturer that the shingles do not contain asbestos. Records shall be kept documenting the asbestos verification of any shingles used in the feed mix consistent with the language requirements in the standard terms and conditions.
- (5) The permittee may substitute slag produced from blast, basic oxygen, and open hearth furnaces into the asphalt mix, as described in OAC rule 3745-51-04(B)(7). Slag produced from other sources must be evaluated in accordance with OAC rule 3745-52-11. If determined to be hazardous waste, the slag must be managed in accordance with applicable regulations in OAC chapter 3745-266, recyclable materials used in a manner constituting disposal.
- (6) The permittee shall only burn natural gas in this emissions unit.
- (7) The emissions from this emissions unit shall be vented to a baghouse at all times the emissions unit is in operation. The discharge of the baghouse (i.e., the baghouse stack) shall be a minimum of 50 feet above the ground, prior to commencing use of slag.

- (8) The sulfur content in the slag used in the aggregate mix shall not exceed 1.75% sulfur, by weight. The permittee may use slag with a higher sulfur content than 1.75% if prior approval is granted by Ohio EPA and stack testing is performed to demonstrate the sulfur dioxide emission limits in b)(1) are not exceeded.
- (9) The amount of slag employed in the mix shall not exceed 3,500 tons per day.
- d) Monitoring and/or Recordkeeping Requirements
- (1) The permittee shall maintain daily records of the following information:
- the amount (tons) of slag, furnace type that produced the slag and type (grade) of slag employed in each mix; and
  - the maximum amount, in percent, of RAP and/or Shingles used in any mix.
- (2) The permittee shall maintain monthly records of the following information:
- the total asphalt production, in tons, for each month;
  - the total slag employed in the mix, in tons, for each month;
  - the rolling, 12-month summation, in tons, of the total slag employed in the mix;
  - the rolling, 12 month summation, in tons, of the total asphalt production;
  - the rolling, 12-month summation, in tons, of the PE, SO<sub>2</sub>\*, NO<sub>x</sub>, VOC, and CO emissions;
- \* The rolling, 12-month summation of SO<sub>2</sub> shall be calculated by using the equation in c)(1)b.
- (3) The permittee shall submit to and receive approval from Ohio EPA for a slag sampling and testing plan prior to using slag. In the slag sampling plan, the permittee shall commit to demonstrating that the sulfur content of the slag does not exceed 1.75%.
- (4) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving 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:
- the color of the emissions;
  - whether the emissions are representative of normal operations;
  - if the emissions are not representative of normal operations, the cause of the abnormal emissions;
  - the total duration of any visible emission incident; and
  - any corrective actions taken to eliminate the visible emissions.

- (5) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible emissions of fugitive dust from non stack egress points of 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 location and 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.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

- (6) 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 g)(1)). An alternative form may be used upon approval of the appropriate Ohio EPA District Office or local air agency. The burner tuning form shall be submitted as part of the permittee's PER submission.
- (7) The permittee shall properly install, operate, and maintain equipment to continuously monitor the pressure drop, in inches of water, across the baghouse when the controlled emissions unit(s) is/are in operation, including periods of startup and shutdown. The permittee shall record the pressure drop across the baghouse on a daily basis. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee. The acceptable pressure drop shall be based upon the manufacturer's specifications until such time as any required performance testing is conducted and the appropriate range is established to demonstrate compliance.

Whenever the monitored value for the pressure drop deviates from the limit or range established in accordance with this permit, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:

- a. the date and time the deviation began;

- b. the magnitude of the deviation at that time;
- c. the date the investigation was conducted;
- d. the name(s) of the personnel who conducted the investigation; and
- e. the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified in this permit, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

- a. a description of the corrective action;
- b. the date corrective action was completed;
- c. the date and time the deviation ended;
- d. the total period of time (in minutes) during which there was a deviation;
- e. the pressure drop readings immediately after the corrective action was implemented; and
- f. the name(s) of the personnel who performed the work.

Investigation and records required by this paragraph do not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

This range or limit on the pressure drop across the baghouse is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the permitted limit or range for the pressure drop based upon information obtained during future testing that demonstrate compliance with the allowable particulate emission rate for the controlled emissions unit(s). In addition, approved revisions to the range or limit will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify:
  - a. all deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations that restrict the Potential to Emit (PTE) of any regulated air pollutant and have been detected by the monitoring, record keeping and/or testing requirements in this permit:
    - i. all exceedances of the rolling 12-month asphalt production limitation.

- ii. all exceedances of the slag restrictions: 1.75% sulfur content and 3,500 tons per day, as listed in c)(6) and c)(7).
- iii. all exceedances of the rolling 12-month total PE, SO<sub>2</sub>, NO<sub>x</sub>, VOC, and CO emission limitations.
- b. probable cause of each deviation (excursion);
- c. any corrective actions that were taken to remedy the deviations (excursions) or prevent future deviations (excursions); and
- d. the magnitude and duration of each deviation (excursion).

If no deviations (excursions) occurred during a calendar quarter, the permittee shall submit a report that states that no deviations (excursions) occurred during the quarter.

The quarterly reports shall be submitted (postmarked) each year by January 31 (covering October to December), April 30 (covering January to March), July 31 (covering April to June), and October 31 (covering July to September), unless an alternative schedule has been established and approved by the Director (the appropriate District Office or local air agency).

- (2) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.
- (3) The permittee shall identify in the annual permit evaluation report the following information concerning the operations of the baghouse during the 12-month reporting period for this/these emissions unit(s):
  - a. each period of time (start time and date, and end time and date) when the pressure drop across the baghouse was outside of the range specified by the manufacturer and outside of the acceptable range following any required compliance demonstration;
  - b. any period of time (start time and date, and end time and date) when the emissions unit(s) was/were in operation and the process emissions were not vented to the baghouse;
  - c. each incident of deviation described in "a" (above) where a prompt investigation was not conducted;
  - d. each incident of deviation described in "a" where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and
  - e. each incident of deviation described in "a" where proper records were not maintained for the investigation and/or the corrective action(s), as identified in the monitoring and record keeping requirements of this permit.

## f) Testing Requirements

(1) Compliance with the emission limitations in b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. Stack Emission Limitations: NO<sub>x</sub> emissions shall not exceed 0.029 pound per ton of asphalt produced; SO<sub>2</sub> emissions while burning natural gas shall not exceed 0.011 pound per ton of asphalt produced; SO<sub>2</sub> emissions while employing slag in the mix shall not exceed 0.53 pound per ton of slag employed in addition to the emissions generated while burning natural gas; CO emissions while burning any approved fuel shall not exceed 0.40 pound per ton of asphalt produced; VOC emissions while burning any approved fuel shall not exceed 0.015 pound per ton of asphalt produced; and PE shall not exceed 0.04 gr/dscf.

b. Applicable Compliance Method: The permittee shall conduct, or have conducted, stack emission testing for this emissions unit in accordance with the following requirements:

i. The emission testing shall be conducted within 120 days after the issuance of this permit or after beginning operation after the issuance of this permit, whichever date is later. Emissions testing for slag use in the mix shall be conducted within 60 days after the initially employing slag if slag was not used during the initial test for the permit cycle. If sand slag is used, emissions testing for sand slag use in the mix shall be conducted within 60 days after the initially employing sand slag if slag is used after the initial testing for the permit cycle.

ii. The emission testing shall be conducted to demonstrate compliance with the allowable stack mass emission rates for PE, VOC, CO, NO<sub>x</sub> and SO<sub>2</sub> for natural gas and slag and RAP use, if applicable. Prior to slag usage emissions testing, the permittee shall consult the appropriate Ohio EPA District Office or local air agency to determine which pollutants should be tested.

iii. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s) for:

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 paragraph 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.

- iv. The test(s) shall be conducted while this emissions unit is operating at or near its maximum asphalt production capacity, employing slag and RAP at their respective maximum allowable usage rates, and burning natural gas, to verify PE, VOC, CO, NO<sub>x</sub> and SO<sub>2</sub> emissions, unless otherwise specified or approved by the appropriate Ohio EPA District Office or 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 appropriate Ohio EPA District Office or 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 appropriate Ohio EPA District Office or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or 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 appropriate Ohio EPA District Office or 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 appropriate Ohio EPA District Office or local air agency.

- c. Emission Limitation: PE stack emissions shall not exceed 6.19 tons per rolling, 12-month period.

Applicable Compliance Method: Compliance shall be determined by multiplying the observed emission rate from the most recent emissions testing while employing RAP and slag, in pounds of PE per ton of asphalt produced, by the actual rolling 12-month summation of asphalt produced for each fuel, in tons per rolling 12-month period (as derived from the records required by d)(2)), summing the results for all fuels, and dividing by 2000.

- d. Emission Limitation: VOC stack emissions shall not exceed 3.71 tons per rolling, 12-month period.

Applicable Compliance Method: Compliance shall be determined by multiplying the observed emission rate from the most recent emissions testing, in pounds of VOC per ton of asphalt produced, by the actual rolling 12-month summation of asphalt produced, in tons per rolling 12-month period (as derived from the records required by d)(2)), summing the results for all fuels, and dividing by 2000.

- e. Emission Limitation: CO stack emissions shall not exceed 99.0 tons per rolling, 12-month period.

Applicable Compliance Method: Compliance shall be determined by multiplying the observed emission rate from the most recent emissions testing, in pounds of CO per ton of asphalt produced for each fuel, by the actual rolling 12-month summation of asphalt produced, in tons per rolling 12-month period (as derived from the records required by term and condition d)(2)), summing the results for all fuels, and dividing by 2000.

- f. Emission Limitation: SO<sub>2</sub> stack emissions shall not exceed 21.6 tons per rolling, 12-month period.

Applicable Compliance Method: Compliance shall be determined by calculating the emissions using the equation in c)(1)b (as derived from the records required by d)(2).

- g. Emission Limitation: NO<sub>x</sub> emissions shall not exceed 7.18 tons per rolling, 12-month period.

Applicable Compliance Method: Compliance shall be determined by multiplying the observed emission rate from the most recent emissions testing, in pounds of NO<sub>x</sub> per ton of asphalt produced for each fuel, by the actual rolling 12-month summation of asphalt produced, in tons per rolling 12-month period (as derived from the records required by d)(2)), summing the results for all fuels, and dividing by 2000.

- h. Emission Limitation: Visible emissions of fugitive dust shall be less than or equal to 10 percent opacity, as a 6-minute average.

Applicable Compliance Method: Upon request by the appropriate Ohio EPA District Office or local air agency, visible particulate emissions shall be determined according to USEPA Method 9.

- i. Emission Limitation: Visible particulate emissions from the stack shall not exceed 20 percent opacity as a 6-minute average.

Applicable Compliance Method: Upon request by the appropriate Ohio EPA District Office or local air agency, visible particulate emissions shall be determined according to USEPA Method 9.

- j. Emission Limitation: Emissions of fugitive dust associated with the cold aggregate, sand and RAP loading, and the cold aggregate, sand and RAP transfer operations shall not exceed 2.5 tons of PM per rolling 12-month period. (AP-42 5th Edition, Table 11.12-2(10/01) and 11.1.2.5 (12/00))



Applicable Compliance Method: Compliance shall be assumed based upon the following worst case calculations:

Fugitive emissions from the cold end are calculated as follows

Hopper loading:

495,000 tons of material/year X 0.0051 lb PM/ton of material = 2524 lbs PM/yr

Aggregate transfer:

297,000 tons of aggregate/year X 0.0069 lb PM/ton of aggregate = 2049 lbs PM/yr

Sand transfer:

198,000 tons of sand/year X 0.0021 lb PM/ton of sand = 416 lbs PM/yr

The sum of the above is 4,990 lbs PM/yr X 1 ton/2000 lbs = 2.5 tons of PM

k. Asphalt Load out and Silo Filling Emissions

Emissions from load out operations shall not exceed 0.33 ton CO per rolling 12-month period, 0.13 ton PE per rolling 12-month period and 0.96 ton of VOC per rolling 12-month period.

Emissions from silo filling operations shall not exceed 0.29 ton CO per rolling, 12-month period, 0.14 ton PE per rolling 12-month period, and 2.97 tons VOC per rolling 12-month period.

Emissions from asphalt load out and silo filling operations 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 per cent of TOC is not VOC AP-42 Table 11.1-16 dated 3/2004

For plant load out, 7.3 per cent of TOC is not VOC AP-42 Table 11.1-16 dated 3/2004

Table with 3 columns: Activity, Pollutant, Predictive Emission Factor Equation, lb/ton. Row 1: 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 annual emissions are as follows:

Activity	Pollutant	Emission Factor lb/ton	Annual Emissions tons/yr (at 495,000 tons/yr production)
Silo filling	PE	$5.86 \times 10^{-4}$	0.145
Load out	PE	$5.22 \times 10^{-4}$	0.129
Silo filling	VOC	$1.20 \times 10^{-2}$	2.97
Load out	VOC	$3.86 \times 10^{-3}$	0.955
Silo filling	CO	$1.18 \times 10^{-3}$	0.292
Load out	CO	$1.35 \times 10^{-3}$	0.334

(2) Burner Tuning

a. Introduction

The permittee shall submit a “burner tuning procedure” for this facility 30 days after the issuance of this permit to Ohio EPA, Central Office. The burner tuning procedure shall contain the basic elements as described in the language below with the ability for the permittee to adjust the frequency of the burner tuning procedure depending upon the production of the plant. In the event no burner tuning procedure is submitted then the following shall be adhered to:

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 NOx, 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 f)(1). The baselines shall be determined for NO<sub>x</sub>, and CO. Sampling should measure the exhaust gas values exiting the dryer or the baghouse. The duration of each sample shall follow the portable monitor manufacturer's recommendations. Record these values on the *Burner Tuning Reporting Form for Asphalt Concrete Plants* form (as found in g)(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 f)(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 manufacturer's specifications.
- iii. Using the calibrated monitor and the monitor manufacturer's recommended sampling duration, measure the stack exhaust gas values for O<sub>2</sub>, 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 percent 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.

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. If the baseline level testing or the initial season tuning is done within 30 days prior to June 1 or September 1, the tuning associated with that due date is not required.

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.

g) Miscellaneous Requirements

- (1) Burner Tuning Form (see next page).
- (2) Modeling to demonstrate compliance with, the "Toxic Air Contaminant Statute", ORC 3704.03(F)(4)(b), was not necessary because the emissions unit's maximum annual emissions for each toxic air contaminant, as defined in OAC rule 3745-114-01, will be less than 1.0 ton per year. 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 toxic air contaminant to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new permit to install.
- (3) Permit P0105994, upon final issuance, will supersede all requirements of PTI #16-02427 issued April 11, 2006, and any other previously issued air permits for P901.



## 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 (i.e.: batch, drum mix, etc.):	Calibration date for analyzers:

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

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

### Tuning Results:

Parameter	Recent Stack Test Pollutant 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 (per cent) <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 manufacturer's specifications. Use additional paper if necessary.

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: