



Environmental Protection Agency

John R. Kasich, Governor
Mary Taylor, Lt. Governor
Scott J. Nally, Director

12/28/2011

Anthony RUGGIERO, III
MAR-ZANE ASPHALT PLANT NO 28
PO BOX 1585
ZANESVILLE, OH 43702-1585

RE: FINALAIR POLLUTION PERMIT-TO-INSTALL AND OPERATE
Facility ID: 0250110985
Permit Number: P0108640
Permit Type: Renewal
County: Mahoning

Certified Mail

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

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 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 Josh Mandel," 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 Ohio EPA DAPC, Northeast District Office at (330)425-9171 or the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469. This permit can be accessed electronically on the DAPCWeb page, www.epa.ohio.gov/dapc, by clicking the "Issued Air Pollution Control Permits" link.

Sincerely,

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

Cc: Ohio EPA-NEDO



FINAL

**Division of Air Pollution Control
Permit-to-Install and Operate
for
MAR-ZANE ASPHALT PLANT NO 28**

Facility ID:	0250110985
Permit Number:	P0108640
Permit Type:	Renewal
Issued:	12/28/2011
Effective:	12/28/2011
Expiration:	12/28/2016



Division of Air Pollution Control
Permit-to-Install and Operate
for
MAR-ZANE ASPHALT PLANT NO 28

Table of Contents

Authorization 1
A. Standard Terms and Conditions 3
1. What does this permit-to-install and operate ("PTIO") allow me to do?..... 4
2. Who is responsible for complying with this permit? 4
3. What records must I keep under this permit? 4
4. What are my permit fees and when do I pay them?..... 4
5. When does my PTIO expire, and when do I need to submit my renewal application? 4
6. What happens to this permit if my project is delayed or I do not install or modify my source? 5
7. What reports must I submit under this permit? 5
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? 5
9. What are my obligations when I perform scheduled maintenance on air pollution control equipment? ... 5
10. Do I have to report malfunctions of emissions units or air pollution control equipment? If so, how must I report? 6
11. Can Ohio EPA or my local air agency inspect the facility where the emission unit(s) is/are located? 6
12. What happens if one or more emissions units operated under this permit is/are shut down permanently? 6
13. Can I transfer this permit to a new owner or operator?..... 7
14. Does compliance with this permit constitute compliance with OAC rule 3745-15-07, "air pollution nuisance"? 7
15. What happens if a portion of this permit is determined to be invalid? 7
B. Facility-Wide Terms and Conditions..... 8
C. Emissions Unit Terms and Conditions 10
1. P901, Counterflow Asphalt Plant with Baghouse..... 11

Authorization

Facility ID: 0250110985
Application Number(s): A0042590
Permit Number: P0108640
Permit Description: Renewal of permit for P901 and administrative modification to allow the use of shingles in the process.
Permit Type: Renewal
Permit Fee: \$0.00
Issue Date: 12/28/2011
Effective Date: 12/28/2011
Expiration Date: 12/28/2016
Permit Evaluation Report (PER) Annual Date: Jan 1 - Dec 31, Due Feb 15

This document constitutes issuance to:

MAR-ZANE ASPHALT PLANT NO 28
2800 CENTER ST
YOUNGSTOWN, OH 44440

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

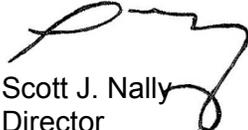
Ohio EPA District Office or local air agency responsible for processing and administering your permit:

Ohio EPA DAPC, Northeast District Office
2110 East Aurora Road
Twinsburg, OH 44087
(330)425-9171

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


Scott J. Nally
Director



Authorization (continued)

Permit Number: P0108640

Permit Description: Renewal of permit for P901 and administrative modification to allow the use of shingles in the process.

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

Emissions Unit ID:	P901
Company Equipment ID:	Counterflow Asphalt Plant with Baghouse
Superseded Permit Number:	02-19250
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 Ohio EPA DAPC, Northeast District Office 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 submitting¹ 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.

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.

¹Permittees 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).

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, Counterflow Asphalt Plant with Baghouse

Operations, Property and/or Equipment Description:

365 TPH (derated from 445 TPH) drum-mix asphalt plant, equipped with a cyclone and fabric filter baghouse. 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) 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. b)(1)d, d)(1), d)(2), d)(3), d)(4) and e)(3).

(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, b)(2)e, b)(2)f, b)(2)g, c)(2), d)(6), e)(1), f)(1)a, f)(1)b, f)(1)c, f)(1)d, f)(1)e, f)(1)i and f)(1)j.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(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 are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	<p>Stack emissions while burning natural gas, propane, number 2 fuel oil, number 4 fuel oil, number 6 fuel oil, and/or on-spec used oil in this emissions unit:</p> <p>Nitrogen oxides (NO_x) emissions shall not exceed 11.0 tons per rolling, 12-month period.</p> <p>Sulfur dioxide (SO₂) emissions shall not exceed 24.98 tons per rolling, 12-month period (slag and non-slag mixes).</p>



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		<p>Carbon monoxide (CO) emissions shall not exceed 26.0 tons per rolling, 12-month period.</p> <p>Volatile organic compounds (VOC) emissions shall not exceed 32.4 tons per rolling, 12-month period.</p> <p>Particulate emissions (PE) shall not exceed 6.10 tons per rolling, 12-month period.</p> <p>Fugitive PE shall not exceed 2.56 tons per rolling, 12-month period.</p> <p>Visible PE from the baghouse stack serving this emissions unit shall not exceed 20% opacity as a 6-minute average.</p> <p>This plant is derated to 265 TPH while producing slag mixes.</p>
b.	OAC rule 3745-31-05(D)	<p>SO₂ emissions shall not exceed 24.98 tons per rolling, 12-month period (slag and non-slag mixes).</p> <p>VOC emissions shall not exceed 32.4 tons per rolling, 12-month period.</p> <p>PE while burning any approved fuel shall not exceed 0.040 gr/dscf.</p> <p>Asphalt Load Out Emissions</p> <p>Emissions from load out operations shall not exceed 0.49 ton CO per rolling, 12-month period, 0.19 ton PE per rolling, 12-month period and 1.4 tons of OC per rolling, 12-month period.</p> <p>Asphalt Silo Filling Emissions</p>

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		<p>Emissions from silo filling operations shall not exceed 0.43 ton CO per rolling, 12-month period, 0.21 ton PE per rolling, 12-month period and 4.4 tons OC per rolling, 12-month period.</p> <p>Cold End Fugitive Dust Emissions</p> <p>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 3.7 tons of PE per rolling, 12-month period.</p>
c.	<p>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) 40 CFR Part 60, Subpart I</p>	<p>The emission limitations required by these applicable rules are less stringent than the emission limitations established pursuant to OAC rule 3745-31-05(A)(3).</p>
d.	ORC 3704.03 (F)	See d)(1), d)(2), d)(3), d)(4) and e)(3).

(2) Additional Terms and Conditions

- a. 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.
- b. The aggregate loaded into the cold aggregate bins shall have a moisture content sufficient to minimize or eliminate visible emissions of fugitive dust from conveyors and all transfer points to the dryer.
- c. There shall be no visible emissions of fugitive dust from the enclosures for the rotary drum and the hot mix asphalt elevator.
- d. Visible emissions of fugitive dust (from areas other than the enclosures for the rotary drum and the hot mix asphalt elevator) shall be less than or equal to 10% opacity as a 3-minute average.
- e. All number 2 and on-spec used oil burned in this emission unit shall have a sulfur content equal to or less than 0.5 per cent, by weight.
- f. All number 4 fuel oil burned in this emission unit shall have a sulfur content equal to or less than 0.8 per cent, by weight.

- g. All number 6 fuel oil burned in this emission unit shall have a sulfur content equal to or less than 1.0 per cent, by weight.
- h. Each shipment of oil burned in this emissions unit shall be “on-specification” (on-spec) oil and shall meet the used oil specifications contained in OAC rule 3745-279-11. The permittee shall determine that the used fuel oil meets these specifications by performing analyses or obtaining copies of analyses or other information from the supplier documenting that the used fuel oil does not exceed (except for flash point which shall not fall below) the following limitations:

Contaminant/Property	Allowable Specifications
arsenic	5 ppm, maximum
cadmium	2 ppm, maximum
chromium	10 ppm, maximum
total halogens	less than 1,000 ppm; or 4,000 ppm maximum if the presumption that the used oil contains hazardous waste is rebutted, as described below
lead	100 ppm, maximum
flash point	100°F, minimum

and shall also not exceed the following maximum PCB and mercury limitations nor fall below the following heating value:

heat content	135,000 Btu/gallon, minimum
PCBs	less than 50 ppm
mercury	1 ppm, maximum

Used oil containing 1,000 ppm or greater total halogens is presumed to be a hazardous waste under the rebuttable presumption provided under paragraph (B)(1) of rule 3745-279-10 of the Administrative Code. The permittee may receive and burn used oil equaling or exceeding 1,000 ppm total halogens, but less than 4,000 ppm, only if the permittee has successfully demonstrated, pursuant to OAC rule 3745-279-63, that the used oil does not contain a listed hazardous waste, by either acquiring and maintaining source process information which demonstrates that the used oil was contaminated by halogenated constituents that would not be listed hazardous waste or by demonstrating that the used oil does not contain significant concentrations of halogens by acquiring and maintaining representative analytical data. Acceptable analytical test protocols that can

be used to analyze used oil for halogenated hazardous constituents include SW-846 Test Methods 9075, 9076, and 9077.*

If analytical results demonstrate that used oil containing 1,000 ppm or more total halogens, but less than 4,000 total halogens, does not contain greater than 100 ppm of any individual halogenated hazardous constituent found in the F001 and F002 listings in OAC rule 3745-51-31 and there is no information suggesting that any other halogenated hazardous constituent (e.g., chlorinated pesticides) has come in contact with the oil, then the presumption that the oil contains hazardous waste has been successfully rebutted.** The rebuttable presumption does not apply to either metal working oils/fluids containing chlorinated paraffins, if processed through a tolling arrangement as described in OAC rule 3745-279-24(C), or used oils contaminated with chlorofluorocarbons removed from refrigeration units.

The burning of used oil not meeting the above limitations is prohibited in this emissions unit and the fuel oil analyses shall document compliance with each limitation before it is burned. The management and burning of used oil is subject to the Standards for the Management of Used Oil, OAC Chapter 3745-279, and the permittee shall document and assure that used oils burned in this emissions unit meet all of the applicable requirements of this Chapter. If the used oil analyses shows total halogens of 1,000 ppm or greater, the permittee shall obtain and maintain all the necessary records to successfully rebut the presumption that the used oil contains or has been mixed with a listed hazardous waste in accordance with this permit.

*EPA publication SW-846, 3rd (or most current) edition, is available from the Government Printing Office, P.O. Box 371954, Pittsburgh, PA 15250-7954; 202/512-1800, document number 955-001-00000-1.

**DHWMP policy documented in "Used Oil Burners - New Guidance for Rebuttable Presumption", published April 2008 or most current policy

c) Operational Restrictions

- (1) The permittee may not receive or burn any used oil which does not meet the specifications listed in b)(2)h of this permit without first obtaining a permit-to-install that authorizes the burning of off-specification used oil. The burning of off-specification used oil, subject to OAC rule 3745-279-60 through 67, is prohibited as a fuel in this emissions unit.
- (2) 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 400,000 tons per rolling, 12-month period. The permittee shall maintain sufficient and appropriate record keeping to adequately demonstrate compliance with the asphalt production limitation upon issuance of the permit.
 - b. the amount of asphalt produced by fuel is restricted by the following equation:

$$48,000 \geq (0.011)(x) + (0.066)(y) + (0.11)(z)$$

where:

x = tons asphalt produced with natural gas and/or propane per rolling, 12-month period;

y = tons asphalt produced with #2 fuel oil and/or used oil per rolling, 12-month period; and

z = tons asphalt produced with #4 fuel oil per rolling, 12-month period.

- (3) 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 VOC, CO and NO_x. The permittee shall submit a copy of all *Burner Tuning Reporting Form for Asphalt Concrete Plants* forms produced during the past calendar year to the appropriate Ohio EPA District Office or local air agency responsible for the permitting of the facility with the PER.
- (4) The permittee may substitute reclaimed asphalt pavement (RAP) and/or asphalt shingles in the raw material feed mix in amounts not to exceed 50 per cent of all aggregate materials on an hourly basis. The permittee may not substitute raw materials for the aggregate such as slag, rubber, etc. without prior approval from Ohio EPA.

The permittee shall use only virgin aggregate, asphalt shingles, and reclaimed asphalt pavement (RAP) in the raw material feed mix. For the purposes of this permit, virgin aggregate shall be clean, uncontaminated, quarried material.

No asbestos-containing asphalt shingles may be used as part of the feed mix. 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.

- (5) The permittee shall only burn natural gas, propane, number 2 fuel oil, number 4 fuel oil, number 6 fuel oil, and/or on-spec used oil in this emissions unit. In order to use a fuel on an ongoing basis, the permittee shall complete the emissions testing for that fuel per f)(2).
- (6) The emissions from this emissions unit shall be vented to a baghouse at all times the emissions unit is in operation.
- (7) The pressure drop across the baghouse shall be maintained within the range of 1 to 8 inches of water while the emissions unit is in operation.

d) Monitoring and/or Recordkeeping Requirements

- (1) The FEPTIO application for this/these emissions unit(s), P901, was evaluated based on the actual materials and the design parameters of the emissions unit's(s') exhaust system, as specified by the permittee. The "Toxic Air Contaminant Statute", ORC

3704.03(F), was applied to this/these emissions unit(s) for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant(s) emitted at over one ton per year using an air dispersion model such as SCREEN3, AERMOD, or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the approved air dispersion model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled "Review of New Sources of Air Toxic Emissions, Option A", as follows:

- a. the exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic compound(s) emitted from the emissions unit(s), (as determined from the raw materials processed and/or coatings or other materials applied) has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):
 - i. threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists' (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; or
 - ii. STEL (short term exposure limit) or the ceiling value from the American Conference of Governmental Industrial Hygienists' (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.
- b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).
- c. This standard is/was then adjusted to account for the duration of the exposure or the operating hours of the emissions unit(s), i.e., "X" hours per day and "Y" days per week, from that of 8 hours per day and 5 days per week. The resulting calculation was (and shall be) used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):

$$TLV/10 \times 8/X \times 5/Y = 4 TLV/XY = MAGLC$$

- d. The following summarizes the results of dispersion modeling for the significant toxic contaminants (emitted at 1 or more tons/year) or "worst case" toxic contaminant(s):

Toxic Contaminant: Heptane w/ option* to list all toxics, covered under the worst-case toxic modeled.

TLV (mg/m³): 1640 (*for which toxic, if using worst case)

Maximum Hourly Emission Rate (lbs/hr): 3.43 (*for which toxic, if using worst case)

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 4.9

MAGLC (ug/m3): 39,048

The permittee, has demonstrated that emissions of Heptane, from emissions unit(s) P901, is calculated to be less than eighty per cent of the maximum acceptable ground level concentration (MAGLC); any new raw material or processing agent shall not be applied without evaluating each component toxic air contaminant in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F).

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

- (2) Prior to making any physical changes to or changes in the method of operation of the emissions unit(s), that could impact the parameters or values that were used in the predicted 1-hour maximum ground-level concentration, the permittee shall re-model the change(s) to demonstrate that the MAGLC has not been exceeded. Changes that can affect the parameters/values used in determining the 1-hour maximum ground-level concentration include, but are not limited to, the following:
- a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a new toxic air contaminant with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled;
 - b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any toxic air contaminant listed in OAC rule 3745-114-01, that was modeled from the initial (or last) application; and
 - c. physical changes to the emissions unit(s) or its/their exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Toxic Air Contaminant Statute" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to a non-restrictive change to a parameter or process operation, where compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), has been documented. If the change(s) meet(s) the definition of a "modification", the permittee shall apply for and obtain a final FEPTIO prior to the change. The Director may consider any significant departure from the operations of the emissions unit, described in the permit application, as a modification that results in greater emissions than the emissions rate modeled to determine the ground level concentration; and he/she may require the permittee to submit a permit application for the increased emissions.

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

- (3) The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F):

- a. a description of the parameters/values used in each compliance demonstration and the parameters or values changed for any re-evaluation of the toxic(s) modeled (the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.);
- b. the Maximum Acceptable Ground-Level Concentration (MAGLC) for each significant toxic contaminant or worst-case contaminant, calculated in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F);
- c. a copy of the computer model run(s), that established the predicted 1-hour maximum ground-level concentration that demonstrated the emissions unit(s) to be in compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), initially and for each change that requires re-evaluation of the toxic air contaminant emissions; and
- d. the documentation of the initial evaluation of compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), and documentation of any determination that was conducted to re-evaluate compliance due to a change made to the emissions unit(s) or the materials applied.

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

- (4) The permittee shall maintain a record of any change made to a parameter or value used in the dispersion model, used to demonstrate compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration. The record shall include the date and reason(s) for the change and if the change would increase the ground-level concentration.

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

- (5) The permittee shall receive and maintain the chemical analyses from the supplier/marketer for each shipment of used oil burned in this emissions unit (or if the oil is generated on site, the permittee shall conduct the chemical analyses), which shall contain the following information:

- a. the date the used oil was received at the facility and the amount received;
- b. the name, address, and U.S. EPA identification number (if applicable) of the generator, transporter, processor/refiner, supplier, and/or marketer;
- c. the results of the following chemical analyses, demonstrating that the used oil meets the standards in OAC rule 3745-279-11:
 - i. arsenic content, in ppm;
 - ii. the cadmium content, in ppm;
 - iii. the chromium content, in ppm;
 - iv. the lead content, in ppm;

- v. total halogens, in ppm; and
- vi. the flash point;
- d. where the chemical analysis shows a total halogen content between 1,000 ppm, and below 4,000 ppm, the successful demonstration for the rebuttal of the presumption that the used oil contains or has been mixed with a listed hazardous waste, as described in OAC rule 3745-279-63(C); and
- e. the results of the analyses demonstrating that the used oil meets the heating value and the mercury and PCB limitations contained in this permit.

Each analysis shall be kept in a readily accessible location for a period of not less than 5 years* following the receipt of each shipment of used oil and shall be made available to the Ohio EPA Division of Hazardous Waste Management and/or the Division of Air Pollution Control (the appropriate Ohio EPA District Office or local air agency) upon verbal or written request. Any authorized representative of the Ohio EPA may sample or require sampling of any used oil shipments received, stored, or burned by/at this facility for periodic detailed chemical analyses through an independent laboratory.

*The Division of Air Pollution Control requires these records to be maintained for 5 years.

- (6) The permittee shall maintain monthly records of the following information:
 - a. the total asphalt production for each month;
 - b. the total asphalt produced for each fuel type for each month;
 - c. the cumulative asphalt production and asphalt production by fuel type, calculated by adding the current month's asphalt production to the asphalt production for each calendar month since the startup of emissions unit P901;
 - d. the rolling, 12 month summation of the total asphalt production and the asphalt production by fuel type, calculated by adding the current month's asphalt production to the asphalt production for the preceding eleven calendar months;
 - e. the rolling, 12-month summation of the PE, SO₂, NO_x, VOC and CO emissions; and
 - f. the maximum percentage of RAP and/or asphalt shingles used for any mix type.
- (7) For each shipment of number 2 fuel oil, number 4 fuel oil, number 6 fuel oil, and on-spec used oil received for burning in this emissions unit, the permittee shall maintain records of the total quantity of oil received and the permittee's or oil supplier's analyses for sulfur content and heat content.
- (8) 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:

- 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.

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.

- (9) The permittee shall perform daily visible emission checks, when the emissions unit is in operation and when the weather conditions allow, for any visible emissions of fugitive dust from the enclosures for the rotary drum and the hot mix asphalt elevator serving this emissions unit. If visible emissions are observed, the permittee shall note the following in the operation 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.
- (10) 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 areas other than the enclosures for the rotary drum and the hot mix asphalt elevator) 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:
 - 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.

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.

- (11) 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)(3)). An alternative form may be used upon approval of the appropriate Ohio EPA District Office or local air agency.
- (12) 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). The acceptable pressure drop shall be based upon the manufacturer's specifications until such time as any required emission 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 administrative modification.

- (13) The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a daily basis.

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 maximum allowable cumulative production levels the probable cause of each deviation (excursion);
 - ii. all exceedances of the rolling 12-month total PE, SO₂, NO_x, VOC and CO emission limitations;
 - iii. all exceedances of the sulfur content limitations in b)(2)e, b)(2)f and b)(2)g;
 - iv. any exceedance of the used oil standards in OAC rule 3745-279-11;

- v. any occasion where used oil containing 1,000 ppm or more total halogens was burned prior to receiving information demonstrating a successful rebuttal of the presumption that the used oil contains or has been mixed with a listed hazardous waste;
 - vi. any exceedance of the limitations for mercury and/or PCBs; and
 - vii. any deviation from the minimum heat content of 135,000 Btu/gallon;
- b. any corrective actions that were taken to remedy the deviations (excursions) or prevent future deviations (excursions); and
 - c. 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 the 31st of January (covering October to December), the 30th of April (covering January to March), the 31st of July (covering April to June), and the 31st of October (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 12-months for each air contaminant source identified in this permit.

The permittee shall identify in the annual permit evaluation report the following information concerning the quality of used oil burned in this emissions unit:

- a. any exceedance of the used oil standards in OAC rule 3745-279-11;
 - b. any occasion where used oil containing 1,000 ppm or more total halogens was burned prior to receiving information demonstrating a successful rebuttal of the presumption that the used oil contains or has been mixed with a listed hazardous waste;
 - c. any exceedance of the limitations for mercury and/or PCBs; and
 - d. any deviation from the minimum heat content of 135,000 Btu/gallon.
- (3) The permittee shall submit quarterly reports to the appropriate Ohio EPA District Office or local air agency, documenting any changes made to a parameter or value used in the dispersion model, that was used to demonstrate compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration. If no changes to the emissions, emissions unit(s), or the exhaust stack have been made, then the report shall include a statement to this effect.

These quarterly reports shall be submitted by April 30, July 31, October 31, and January 31, and shall cover the records for the previous calendar quarters.

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

- (4) Where the analytical results for any shipment of used oil burned in this emissions unit establish that the used oil contains total halogens greater than 1,000 ppm, but less than 4,000 ppm, the results of the analysis for total halogens (from the appropriate test Method 9075, 9076, or 9077) and the information obtained to rebut the presumption that the used oil contains or has been mixed with a listed hazardous waste shall be submitted to the appropriate District Office or local air agency. Each rebuttal demonstration shall include:
- a. the date the used oil was received;
 - b. the facility location or identification number where the oil was or will be burned;
 - c. the amount of oil in the shipment; and
 - d. all information, including all the analytical results, relied upon by the permittee to rebut the presumption that the used oil contains or has been mixed with a listed hazardous waste.
- The rebuttal demonstrations for used oil received from October to December shall be submitted by January 31; used oil received from January to March, by April 30; used oil received from April to June, by July 31; and used oil received from July to September, by October 31.
- (5) The permittee shall submit deviation (excursion) reports that identify any exceedances of the rolling, 12-month cumulative operation hour's limitation.
- (6) The permittee shall identify the following information in the annual permit evaluation report in accordance with the monitoring requirements for visible emissions in term number b)(1)a above:
- a. all days during which any visible particulate emissions were observed from the stack serving this emissions unit; and
 - b. any corrective actions taken to minimize or eliminate the visible particulate emissions.
- (7) The permittee shall identify the following information in the annual permit evaluation report in accordance with the monitoring requirements for visible emissions in term number b)(2)c above:
- a. all days during which any visible emissions of fugitive dust were observed from the enclosures for the rotary drum and the hot mix asphalt elevator; and
 - b. any corrective actions taken to eliminate the visible emissions.

- (8) The permittee shall identify the following information in the annual permit evaluation report in accordance with the monitoring requirements for visible emissions in term number b)(2)d above:
 - a. all days during which any visible emissions of fugitive dust were observed from areas other than the enclosures for the rotary drum and the hot mix asphalt elevator; and
 - b. any corrective actions taken to minimize or eliminate the visible emissions.

- f) Testing Requirements
 - (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emission Limitation:

PE shall not exceed 6.10 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 PE per ton of asphalt produced for each fuel, 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 then dividing by 2000 lbs/ton.

 - b. Emission Limitation:

VOC emissions shall not exceed 32.4 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 for each fuel, 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 then dividing by 2000 lbs/ton.

 - c. Emission Limitation:

CO emissions shall not exceed 26.0 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 for

each fuel, 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 then dividing by 2000 lbs/ton.

d. Emission Limitation:

SO₂ emissions shall not exceed 24.98 tons per rolling, 12-month period (slag and non-slag mixes).

Applicable Compliance Method:

Compliance shall be determined by multiplying the observed emission rate from the most recent emissions testing, in pounds of SO₂ per ton of asphalt produced for each fuel, 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 then dividing by 2000 lbs/ton.

e. Emission Limitation:

NO_x emissions shall not exceed 11.0 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 NO_x per ton of asphalt produced for each fuel, 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 then dividing by 2000 lbs/ton.

f. Emission Limitation:

There shall be no visible emissions of fugitive dust from the enclosures for the rotary drum and the hot mix asphalt elevator.

Applicable Compliance Method:

If required, 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.

g. Emission Limitation:

Visible emissions of fugitive dust (from areas other than the enclosures for the rotary drum and the hot mix asphalt elevator) shall be less than or equal to 10% opacity as a 3-minute average.

Applicable Compliance Method:

If required, compliance shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), 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:

Visible PE from the baghouse stack serving this emissions unit shall not exceed 20% opacity as a 6-minute average.

Applicable Compliance Method:

If required, 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.

i. 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 3.7 tons of PE per rolling, 12-month period.

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:

400,000 tons of material/year X 0.0051 lb PE/ton of material = 2040 lbs PE/yr

Aggregate transfer:

240,000 tons of aggregate/year X 0.0069 lb PE/ton of aggregate = 1656 lbs PE/yr

Sand transfer:

160,000 tons of sand/year X 0.0021 lb PE/ton of sand = 336 lbs PE/yr

The sum of the above is 4032 lb PE/yr X 1 ton/2000 lbs = 2.02 tons of PE

The emission factors were obtained from AP-42 5th Edition, Table 11.12-2 (10/01) and 11.1.2.5 (12/00).

j. Emission Limitations:

Emissions from load out operations shall not exceed 0.49 ton CO per rolling, 12-month period, 0.19 ton PE per rolling, 12-month period and 1.4 tons of OC per rolling, 12-month period.

Emissions from silo filling operations shall not exceed 0.43 ton CO per rolling, 12-month period, 0.21 ton PE per rolling, 12-month period and 4.4 tons OC per rolling, 12-month period.

Applicable Compliance Method:

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

Activity	Pollutant	Predictive Emission Factor Equation, lb/ton
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:



Activity	Pollutant	lb/ton	tons/yr (at 400,000 tons/yr production)
Silo filling	PE	5.86×10^{-4}	0.12
Load out	PE	5.22×10^{-4}	0.10
Silo filling	VOC	1.20×10^{-2}	2.40
Load out	VOC	3.86×10^{-3}	0.77
Silo filling	CO	1.18×10^{-3}	0.24
Load out	CO	1.35×10^{-3}	0.27

k. Emission Limitation:

PE while burning any approved fuel shall not exceed 0.040 gr/dscf.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the emission test procedures specified in f)(2).

l. Emission Limitation:

Fugitive PE shall not exceed 2.56 tons per rolling, 12-month period.

Applicable Compliance Method:

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

$$((400,000 \text{ tons of aggregate/year} \times 0.0069 \text{ lb PM/ton of aggregate}) + (400,000 \text{ tons of sand/year} \times 0.0021 \text{ lb PM/ton of sand})) \times 1 \text{ ton}/2000 \text{ lb} = 1.8 \text{ tons.}$$

The emissions factors in the above equation are derived from AP-42, Fifth Edition, Table 11.12.2 (6/06).

- (2) The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
 - a. The emissions testing shall be conducted to demonstrate compliance with the established emission limitations requirements specified approximately 1.0 years after permit issuance and within 6 months prior to the permit expiration.
 - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for PE, VOC, CO, NO_x and SO₂ for the primary

fuel. Prior to secondary fuel emissions testing, the permittee shall consult the Ohio EPA Northeast District Office to determine which pollutants should be tested.

- c. 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_x, Methods 1-4 and 7 or 7E of 40 CFR Part 60, Appendix A;

SO₂, 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; and

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

Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

- d. 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). In lieu of this the permittee shall convert the mass emission value from VOC as carbon to VOC using the molecular weight of propane, i.e., the VOC as carbon emission rate observed during testing shall be converted to the appropriate units by multiplying the VOC emission rate observed during testing (in lbs./hr) by 44 (propane) and dividing by 36 (3 atoms of carbon).
- e. The test(s) shall be conducted while this emissions unit is operating at or near its maximum capacity and burning natural gas, number 2 fuel oil, number 4 fuel oil, number 6 fuel oil or on-spec used oil for PE, VOC, CO, NO_x and SO₂ and employing RAP to verify VOC emissions, unless otherwise specified or approved by the Ohio EPA Northeast District Office.
- f. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA Northeast District Office. 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 Ohio EPA Northeast District Office's refusal to accept the results of the emission test(s).
- g. Personnel from the Ohio EPA Northeast District Office 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.

- h. 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 Ohio EPA Northeast District Office 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 Ohio EPA Northeast District Office.

(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_x, O₂ 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)(2). The baselines shall be determined for NO_x 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 manufacture's recommendations. Record these values on the *Burner Tuning Reporting Form for Asphalt Concrete Plants* form (as found in g)(3)) 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). 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 O₂, NO_x 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 per cent 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 per cent 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 per cent 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 31 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 appropriate 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. 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.

- (4) The concentrations of contaminants (arsenic, barium, cadmium, chromium, lead, mercury, PCBs, and total halogens) in the used oil shall be analyzed using a "total constituent analysis" method, as specified in U.S. EPA publication SW-846, "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods." The applicable test methods that should be used are as follows:

Arsenic, barium, cadmium, chromium, and lead: SW-846, Method 3031 or 3051 (digestion procedures) followed by analysis using Method 6010B or 6020;
Mercury: SW-846, Method 7471A;

PCBs: SW-846, Method 8270C or 8082; and

Total halogens: SW-846, Method 9075, 9076, or 9077.

The permittee shall submit a written request and receive approval from Ohio EPA Division of Hazardous Waste Management and/or the Division of Air Pollution Control, of Central Office, before an alternative test method, not listed above, can be used for the total constituent analysis of the above-mentioned used oil contaminants.

g) Miscellaneous Requirements

(1) Relocation of Portable Sources

- a. Pursuant to OAC paragraph 3745-31-03(A)(1)(p)(i), the permittee of a portable or mobile emissions unit may relocate within the State of Ohio without first obtaining a permit-to-install (PTI) providing the following criteria are met:
- i. the portable emissions unit is equipped with the best available technology for such portable emissions unit;
 - ii. the portable emissions unit is operating pursuant to a currently effective permit-to-install, permit to operate (PTO), or registration status;
 - iii. the applicant has provided proper notice of intent to relocate the portable emissions unit to the appropriate Ohio EPA District Office or local air agency responsible for the permits for the source and the appropriate Ohio EPA District Office or local air agency having jurisdiction over the new site, within a minimum of 30 days prior to the scheduled relocation; and
 - iv. in the appropriate Ohio EPA District Office or local air agency responsible for the permits for the source and the appropriate Ohio EPA District Office or local air agency having jurisdiction over the new site's judgement, the proposed site is acceptable under OAC rule 3745-15-07.

- b. In the alternative, pursuant to OAC paragraph 3745-31-03(A)(1)(p)(ii), the permittee of a portable or mobile emissions unit may relocate within the State of Ohio without first obtaining a PTI, providing the following criteria of OAC paragraph 3745-31-05(E) are met:
- i. the portable emissions unit permittee possesses an Ohio EPA PTI, PTO or registration status;
 - ii. the portable emissions unit is equipped with best available technology;
 - iii. the portable emissions unit owner has identified the proposed site to Ohio EPA;
 - iv. Ohio EPA has determined that the portable emissions unit, at the proposed site, will have an acceptable environmental impact;
 - v. a public notice, consistent with OAC Chapter 3745-47, is published in the county where the proposed site is located;
 - vi. the owner of the proposed site has provided the portable emissions unit owner with approval or equivalent declaration that it is acceptable to the site owner to move the portable emissions unit to this proposed site; and
 - vii. the portable emissions unit owner has provided Ohio EPA with 15 days written notice of the relocation.

Any site approvals issued by the Ohio EPA, pursuant to OAC paragraph 3745-31-03(A)(1)(p)(ii), shall be valid for no longer than 3 years and are subject to renewal.

In order for the (the permitting Ohio EPA District Office or local air agency) and the appropriate field office having jurisdiction over the new site to determine compliance with all of the above criteria, the permittee of the portable or mobile emissions unit must file a "Notice of Intent to Relocate", within the specified time frame (30 or 15 days) prior to the relocation of the emissions unit with the appropriate Ohio EPA District Office or local air agency responsible for the permits for the source and the appropriate Ohio EPA District Office or local air agency having jurisdiction over the new site. Upon receipt of the notice, the appropriate Ohio EPA District Office or local air agency responsible for the permits for the source, and/or appropriate Ohio EPA District Office or local air agency having jurisdiction over the new site, will evaluate the request in accordance with the above criteria.

Failure to submit said notification and to receive Ohio EPA approval prior to relocation of the emissions unit may result in fines and civil penalties.

- c. Pursuant to OAC paragraph 3745-31-05(F), the Director may modify the site approval to add or delete certain portable sources or add or delete certain terms and conditions as appropriate.

- (2) The following source is subject to the applicable provision of the New Source Performance Standards (NSPS) as promulgated by the United States Environmental Protection Agency, 40 CFR Part 60.

Source Number	Source Description	NSPS Regulation (Subpart)
P901	365 ton/hr asphalt plant	Subpart I

The application and enforcement of these standards are delegated to the Ohio EPA. The requirements of 40 CFR Part 60 are also federally enforceable.

Pursuant to NSPS, the source owner/operator is hereby advised of the requirement to report the following at the appropriate times:

- a. Construction date (no later than 30 days after such date);
- b. 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 appropriate Ohio EPA District Office or local air agency responsible for the permitting of the facility.

- (3) Burner Tuning Form (see next page)



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)

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

Tuning Results:

Parameter	Recent Stack Test Pollutant Baseline Levels ¹	Results	
		Pre Tuning	Post Tuning ³
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) ²			
NOx concentrations (ppm) ²			
Oxygen concentrations (per cent) ²			
Asphalt Production (tons/hr)			

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

² Specify whether on a dry or wet basis.

³ 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.

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: