



4/21/2014

Jim Scheub  
Gerken Materials, Inc.  
9072 County Road 424  
Napoleon, OH 43522

RE: DRAFT AIR POLLUTION PERMIT-TO-INSTALL AND OPERATE

Facility ID: 0335980007  
Permit Number: P0112150  
Permit Type: Administrative Modification  
County: Lucas

Certified Mail

No	TOXIC REVIEW
No	SYNTHETIC MINOR TO AVOID MAJOR NSR
No	CEMS
No	MACT/GACT
Yes	NSPS
No	NESHAPS
No	NETTING
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:

A draft of the Ohio Administrative Code (OAC) Chapter 3745-31 Air Pollution Permit-to-Install and Operate (PTIO) for the referenced facility has been issued for the emissions unit(s) listed in the Authorization section of the enclosed draft permit. This draft action is not an authorization to begin construction or modification of your emissions unit(s). The purpose of this draft is to solicit public comments on the permit. A public notice will appear in the Ohio Environmental Protection Agency (EPA) Weekly Review and the local newspaper, Toledo Blade. A copy of the public notice and the draft permit are enclosed. This permit can be accessed electronically on the Division of Air Pollution Control (DAPC) Web page, [www.epa.ohio.gov/dapc](http://www.epa.ohio.gov/dapc) by clicking the "Search for Permits" link under the Permitting topic on the Programs tab. Comments will be accepted as a marked-up copy of the draft permit or in narrative format. Any comments must be sent to the following:

Andrew Hall Permit Review/Development Section Ohio EPA, DAPC 50 West Town Street Suite 700 PO Box 1049 Columbus, Ohio 43216-1049	and	Ohio EPA DAPC, Northwest District Office 347 North Dunbridge Road Bowling Green, OH 43402
---	-----	---

Comments and/or a request for a public hearing will be accepted within 30 days of the date the notice is published in the newspaper. You will be notified if a public hearing is scheduled. A decision on issuing a final permit-to-install will be made after consideration of comments received and oral testimony if a public hearing is conducted. Any permit fee that will be due upon issuance of a final Permit-to-Install is indicated in the Authorization section. Please do not submit any payment now. If you have any questions, please contact Ohio EPA DAPC, Northwest District Office at (419)352-8461.

Sincerely,

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

Cc: U.S. EPA Region 5 Via E-Mail Notification  
TDES; Michigan; Indiana; Canada



PUBLIC NOTICE  
4/21/2014 Issuance of Draft Air Pollution Permit-To-Install and Operate

Gerken Materials, Inc.  
600 South River Road,  
Waterville Twp, OH 43566  
Lucas County

FACILITY DESC.: Asphalt Paving Mixture and Block Manufacturing

PERMIT #: P0112150

PERMIT TYPE: Administrative Modification

PERMIT DESC: This permit is an administrative modification and shall also serve as a renewal action. The administrative modification addresses updates to fuel specific emission factors, revised hourly throughput to reflect a maximum of 350 tons per hour, and to address the use of propane, shingles, and slag as proposed in the initial application submittal.

The Director of the Ohio Environmental Protection Agency issued the draft permit above. The permit and complete instructions for requesting information or submitting comments may be obtained at: <http://epa.ohio.gov/dapc/permitonline.aspx> by entering the permit # or: Andrea Moore, Ohio EPA DAPC, Northwest District Office, 347 North Dunbridge Road, Bowling Green, OH 43402. Ph: (419)352-8461





## Permit Strategy Write-Up

1. Check all that apply:

Synthetic Minor Determination

Netting Determination

2. Source Description:

This permitting action involves an administrative modification of an existing air contaminant source and shall also serve as a renewal action for a portable three hundred and fifty tons per hour (350 tph), counter flow, drum mix, hot mix asphalt plant, emissions unit P901. The administrative modification addresses updates to fuel specific emission factors, revised hourly throughput to reflect a maximum of 350 tph, and to address the use of propane, shingles, and slag as proposed in the permittee's initial air permit application. This administrative modification will also establish a single limitation for both stack and fugitive emission in accordance with recent ERAC appeal decisions.

3. Facility Emissions and Attainment Status:

The portable asphalt plant was established as a synthetic minor facility through the issuance of permit to install (PTI 03-16344) in 2005 with federally enforceable limitations based on production restrictions for purposes of avoiding Prevention of Significant Deterioration (PSD) and Title V applicability. The asphalt plant was issued a renewal permit to operate (P0087223) in 2007. The asphalt plant is a portable unit and is required to evaluate major source permitting requirements associated with any relocation of the source.

Source Emissions:

This draft federally enforceable permit to install and operate (FEPTIO) involves a renewal of the previously established federally enforceable restriction of 325,000 tons of asphalt production per rolling 12-month period. The annual production restriction will result in emissions of 7.13 tons per year of particulate emissions (PE), 10.10 tons per year of nitrogen oxide (NOx), 24.0 tons per year of sulfur dioxide (SO<sub>2</sub>), 21.55 tons per year of carbon monoxide (CO) and 18.91 tons per year of volatile organic compounds (VOC).

4. Conclusion:

Federally enforceable mass emission limitations and restrictions contained in this permit action which will limit the potential to emit of the asphalt plant to below major stationary source emission threshold levels. The restricted potential to emit shall also be used in any evaluation for major source permitting requirements associated with relocation of the asphalt plant.

5. Please provide additional notes or comments as necessary:

None



6. Total Permit Allowable Emissions Summary (for informational purposes only):

<u>Pollutant</u>	<u>Tons Per Year</u>
NOx	10.10
SO2	24.0
CO	21.55
VOC	18.91
PE	7.13



**DRAFT**

**Division of Air Pollution Control  
Permit-to-Install and Operate  
for  
Gerken Materials, Inc.**

Facility ID:	0335980007
Permit Number:	P0112150
Permit Type:	Administrative Modification
Issued:	4/21/2014
Effective:	To be entered upon final issuance
Expiration:	To be entered upon final issuance





**Division of Air Pollution Control  
Permit-to-Install and Operate**

for  
Gerken Materials, Inc.

**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, HMA Portable Plant 4 .....	11





**Draft Permit-to-Install and Operate**

Gerken Materials, Inc.

**Permit Number:** P0112150

**Facility ID:** 0335980007

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

## Authorization

Facility ID: 0335980007  
Application Number(s): A0046258  
Permit Number: P0112150  
Permit Description: This permit is an administrative modification and shall also serve as a renewal action. The administrative modification addresses updates to fuel specific emission factors, revised hourly throughput to reflect a maximum of 350 tons per hour, and to address the use of propane, shingles, and slag as proposed in the initial application submittal.  
Permit Type: Administrative Modification  
Permit Fee: \$0.00 *DO NOT send payment at this time, subject to change before final issuance*  
Issue Date: 4/21/2014  
Effective Date: To be entered upon final issuance  
Expiration Date: To be entered upon final issuance  
Permit Evaluation Report (PER) Annual Date: To be entered upon final issuance

This document constitutes issuance to:

Gerken Materials, Inc.  
600 South River Road  
Waterville Twp, OH 43566

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

Ohio Environmental Protection Agency (EPA) District Office or local air agency responsible for processing and administering your permit:

Ohio EPA DAPC, Northwest District Office  
347 North Dunbridge Road  
Bowling Green, OH 43402  
(419)352-8461

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

Craig W. Butler  
Director



**Draft Permit-to-Install and Operate**

Gerken Materials, Inc.

**Permit Number:** P0112150

**Facility ID:** 0335980007

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

## Authorization (continued)

**Permit Number:** P0112150

**Permit Description:** This permit is an administrative modification and shall also serve as a renewal action. The administrative modification addresses updates to fuel specific emission factors, revised hourly throughput to reflect a maximum of 350 tons per hour, and to address the use of propane, shingles, and slag as proposed in the initial application submittal.

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:

350 TPH portable drum mix asphalt plant

Superseded Permit Number:

P0087223

General Permit Category and Type:

Not Applicable



**Draft Permit-to-Install and Operate**

Gerken Materials, Inc.

**Permit Number:** P0112150

**Facility ID:** 0335980007

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

## **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. For facilities that are permitted as synthetic minor sources, the fee schedule is adjusted annually for inflation. 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 of this permit 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, Northwest 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 submitting 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 emission 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.



**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.



**Draft Permit-to-Install and Operate**

Gerken Materials, Inc.

**Permit Number:** P0112150

**Facility ID:** 0335980007

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

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



**Draft Permit-to-Install and Operate**

Gerken Materials, Inc.

**Permit Number:** P0112150

**Facility ID:** 0335980007

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

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.



**Draft Permit-to-Install and Operate**

Gerken Materials, Inc.

**Permit Number:** P0112150

**Facility ID:** 0335980007

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

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



**1. P901, HMA Portable Plant 4**

**Operations, Property and/or Equipment Description:**

350 TPH, portable, counter flow, drum mix, HMA Plant 4

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. d)(9).

(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)a., b)(2)g., b)(2)h., c)(2), c)(6), d)(2), d)(3), e)(1), and f)(1)a. through f)(1)f.

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><u>Stack Emissions:</u></p> <p>Nitrogen oxides (NO<sub>x</sub>) emissions while burning natural gas shall not exceed 0.026 pound per ton of asphalt produced.</p> <p>NO<sub>x</sub> emissions while burning on-spec used oil, number 2 fuel oil or propane shall not exceed 0.055 pound per ton of asphalt produced.</p> <p>NO<sub>x</sub> emissions while burning number 4 fuel oil shall not exceed 0.062 pound per ton of asphalt produced.</p> <p>Sulfur dioxide (SO<sub>2</sub>) emissions while burning natural gas or propane shall not exceed 0.0034 pound per ton of asphalt</p>



**Draft Permit-to-Install and Operate**

Gerken Materials, Inc.

**Permit Number:** P0112150

**Facility ID:** 0335980007

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		<p>produced.</p> <p>SO<sub>2</sub> emissions while burning on-spec used oil or number 2 fuel oil shall not exceed 0.058 pound per ton of asphalt produced.</p> <p>SO<sub>2</sub> emissions while burning number 4 fuel oil shall not exceed 0.11 pound per ton of asphalt produced.</p> <p>SO<sub>2</sub> emissions, while employing slag, shall not exceed 0.53 pound per ton of slag applied in addition to the emissions generated while burning any permitted fuel [See c)(6)].</p> <p>Carbon monoxide (CO) emissions while burning any approved fuel shall not exceed 0.13 pound per ton of asphalt produced.</p> <p>Volatile organic compound (VOC) emissions while burning any approved fuel shall not exceed 0.10 pound per ton of asphalt produced.</p> <p>Particulate emissions (PE) while burning any approved fuel shall not exceed 0.033 pound per ton of asphalt produced.</p> <p>PE shall not exceed 0.03 gr/dscf of exhaust gas.</p> <p>See b)(2)b. through b)(2)i.</p>
b.	OAC rule 3745-31-05(D)	<p><u>Long Term Emissions:</u></p> <p>NO<sub>x</sub> emissions shall not exceed 11.10 tons per rolling, 12-month period.</p> <p>SO<sub>2</sub> emissions shall not exceed 24.0 tons per rolling, 12-month period.</p> <p>CO emissions shall not exceed 21.55 tons per rolling, 12-month period.</p> <p>VOC emissions shall not exceed</p>



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		18.91 tons per rolling, 12-month period.  PE emissions shall not exceed 7.13 tons per rolling, 12-month period. See b)(2)a. and b)(2)l.
c.	40 CFR, Part 60, Subpart I	Emissions from the baghouse stack shall not exhibit 20% opacity or greater.  See b)(2)j.
d.	OAC rule 3745-17-07(B)	See b)(2)k.
e.	OAC rule 3745-17-07(A)	See b)(2)m.
f.	OAC rule 3745-17-11(B)	See b)(2)j.
i.	OAC rule 3745-18-06(E)	See b)(2)j.
j.	OAC rule 3745-17-08(B)	See b)(2)k.

(2) Additional Terms and Conditions

- a. This permit establishes federally enforceable emission limitations for purposes of limiting potential to emit (PTE) to avoid Prevention of Significant Deterioration (PSD) and Title V applicability. The federally enforceable emission limitations are identified in b)(1)b. and are based on requirements contained in b)(2)g. and b)(2)h. and the operational restriction contained in c)(2).
- b. The permittee shall properly install (or have properly installed), adjust, operate, and maintain a baghouse to serve this emissions unit, including enclosures, ductwork, fans, and any other equipment necessary to capture, contain, and vent particulate emissions to the baghouse serving this emissions unit, in accordance with the manufacturer's recommendations, instructions, and operating manuals, and to the extent possible with good engineering design.
- c. 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.
- d. 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.
- e. There shall be no visible emissions of fugitive dust from the enclosures for the rotary drum and the hot mix asphalt elevator.
- f. 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 percent opacity, as a 3-minute average.
- g. 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 percent, by weight



- h. All number 4 fuel oil burned in this emissions unit shall have a sulfur content equal to or less than 0.8 percent, by weight.
- i. 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:

<b>Contaminant/Property</b>	<b>Allowable Specifications</b>
Arsenic	5 ppm, maximum
Cadmium	2 ppm, maximum
Chromium	10 ppm, maximum
Total halogens	less than 1,000 ppm; or less than 4,000 ppm if the presumption that the used oil contains hazardous waste is rebutted, as described below
Lead	100 ppm, maximum
Flash point	100°F, minimum

The used oil burned in this emissions unit shall contain less than the quantifiable levels of PCBs as defined in 40 CFR 761.3; and shall also not exceed the following mercury limitation nor fall below the following heating value:

Heat content	135,000 Btu/gallon, minimum
PCB's	Less than 2 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, 3<sup>rd</sup> (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.

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

- j. The requirements of this rule are equivalent to or less stringent than the requirements of OAC rule 3745-31-05(A).
- k. This emissions unit is a portable source and is applicable to the requirements of OAC rule 3745-17-07(B) and OAC rule 3745-17-08(B) when located in an "Appendix A" area as identified in OAC rule 3745-17-08. The emission limitations and control requirements established by OAC rule 3745-17-07(B) and OAC rule 3745-17-08(B) are equivalent to or less stringent than the requirements established pursuant to OAC rule 3745-31-05(A)(3).
- l. Long term emission limitations include both stack and fugitive emissions.
- m. The requirements of this rule are equivalent to or less stringent than the requirements of 40 CFR Part 60 Subpart I.



c) Operational Restrictions

(1) The permittee may not receive or burn any used oil which does not meet the standards in OAC rule 3745-279-11 and the specifications listed in this permit without first obtaining a permit-to-install or permit-to-install and operate 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 permittee has requested a federally enforceable limitation on asphalt produced in order to restrict the federally enforceable potential to emit. Annual asphalt production from emissions unit P901 shall not exceed 325,000 tons per year, based on a rolling, 12 month summation of the monthly production rates.

The rolling tons per year limitation for emissions unit P901 was initially established in Permit to Install (PTI) 03-16344 issued on September 9, 2005 and, as such, rolling tons per year of operation records exist. The permittee shall use the existing records to determine compliance upon issuance of this permit. Therefore, it is not necessary to establish federally enforceable restrictions for the first 12 months of operation under the provisions of this permit.

b. The amount of asphalt produced and the SO<sub>2</sub> emissions are restricted by the following equation:

$$[(0.0034)*(a) + (0.058)*(b) + (0.11)*(c) + (0.53)*(d)]/2000 \leq 24.0 \text{ tons per rolling, 12-month period}$$

a = tons of asphalt produced while burning natural gas and/or propane per rolling, 12-month period;

b = tons of asphalt produced while burning on-spec used oil and/or #2 fuel oil per rolling, 12-month period;

c = tons of asphalt produced while burning #4 fuel oil per rolling 12-month period; and

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

\* Factors may be revised based upon Ohio EPA validated emission testing and shall be revised if emission testing results in higher emissions.

(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 CO and NO<sub>x</sub>. 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 amounts not to exceed 50 percent of each asphalt mix produced.

The permittee may substitute asphalt shingles. 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.

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.

- (5) The permittee shall only burn propane, natural gas, number 2, number 4 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 emission testing for that fuel per paragraph f)(2).
- (6) 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.
- (7) The pressure drop across the baghouse shall be maintained within the range of 2 to 8 inches of water while the emissions unit is in operation.

d) **Monitoring and/or Recordkeeping Requirements**

- (1) 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.

- (2) The permittee shall maintain daily records of the following information:
- a. the maximum amount, in percent, of RAP and/or shingles used in any mix; and
  - b. the type of slag used, in tons.
- (3) The permittee shall maintain monthly records of the following information for emissions unit P901:
- a. the total asphalt produced for each fuel type, in tons, for each month;
  - b. the type of slag used, i.e. size classification;
  - c. the total slag usage, in tons;
  - d. the maximum amount, in percent, of RAP and/or shingles used in any mix;
  - e. the rolling, 12-month summation of the asphalt production, in tons and the asphalt production by fuel type, in tons; and
  - f. the rolling, 12-month summation, in tons, of the PE, SO<sub>2</sub>\*, NO<sub>x</sub>, OC, and CO emissions.



\* The rolling, 12-month summation of SO<sub>2</sub> shall be calculated by using the equation in c)(2).

- (4) For each shipment of number 2 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. A shipment may be comprised of multiple tank truck loads from the same supplier's batch, and the quality of the oil for those loads may be represented by a single batch analysis from the supplier.
- (5) The permittee shall submit and receive approval from Ohio EPA for a slag sampling and testing plan prior to applying slag in the asphalt mix. In the slag sampling plan, the permittee shall commit to demonstrating that the sulfur content of the slag does not exceed 1.75%.
- (6) 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 eliminate the visible emissions.

If visible emissions are present, a visible emissions incident has occurred. The observer does not have to document the exact start and end times for the visible emissions incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emissions 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.

- (7) 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.

- (8) 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. 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.
- (9) Modeling to demonstrate compliance with the Ohio EPA's "Air Toxic Policy" was not necessary because the emissions unit's maximum annual emissions for each toxic compound will be less than 1.0 ton. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that the changes in the composition of the materials, or use of new materials, that would cause the emissions of any pollutant that has a listed TLV to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new FEPTIO.
- (10) The FEPTIO for this emissions unit was evaluated based on information contained in the PTIO application associated with this emissions unit. Prior to any physical change or change in the method of operation (i.e. employing slag, or using an alternative fuel oil etc.) associated with this emissions unit, the permittee shall conduct an evaluation to determine if the change would constitute a "modification" as defined in OAC rule 3745-31-01. If any physical change in, or change(s) in the method of operation is (are) defined as a modification, then the permittee shall obtain a final PTIO modification prior to performing such change. The permittee shall collect, record, and retain all evaluation information and the final determination when modification evaluations are performed.
- (11) 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.

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:

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

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 production limitation for this emissions unit;
  - ii. all exceedances of the rolling, 12-month total PE, SO<sub>2</sub>, NO<sub>x</sub>, VOC, and CO emission limitations;
  - iii. all exceedances of the sulfur content limitations listed in b)(2)g., b)(2)h. and c)(6);
  - iv. each period of time (start time and date, and end time and date) when the pressure drop across the baghouse was outside of the acceptable range;
  - v. any period of time (start time and date, and end time and date) when the emissions unit was in operation and the process emissions were not vented to the baghouse; and
- 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, electronically through Ohio EPA Air Services, 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) All applications, notifications or reports required by terms and conditions in this permit to be submitted or "reported in writing" are to be submitted to Ohio EPA through the Ohio EPA's eBusiness Center: Air Services web service ("Air Services"). Ohio EPA will accept hard copy submittals on an as-needed basis if the permittee cannot submit the required documents through the Ohio EPA eBusiness Center. In the event of an alternative hard copy submission in lieu of the eBusiness Center, the post-marked date or the date the document is delivered in person will be recognized as the date submitted. Electronic submission of applications, notifications, or reports required to be submitted to Ohio EPA fulfills the requirement to submit the required information to the Director, the District Office or Local Air Agency, and/or any other individual or organization specifically



identified as an additional recipient identified in this permit unless otherwise specified. Consistent with OAC rule 3745-15-03, the required application, notification or report is considered to be "submitted" on the date the submission is successful using a valid electronic signature. Signature by the signatory authority may be represented as provided through procedures established in Air Services.

- (3) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be submitted 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.
- (4) The permittee shall identify in the annual PER 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.
- (5) 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.

- (6) The permittee shall identify the following information in the PER in accordance with the monitoring requirements for visible emissions in d)(6) 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.

The above information shall be provided as an attachment to the PER. If there are no day(s) and/or corrective action(s) to identify as required above, the permittee shall indicate within the "Additional Information and Corrections" section of the PER that no visible emissions were observed and no corrective actions were taken.

- (7) The permittee shall identify the following information in the annual PER in accordance with the monitoring requirements for visible emissions in term number d)(7) above:
  - a. all days during which any visible emissions of fugitive dust were observed from the non-stack egress points serving this emissions unit; and
  - b. any corrective actions taken to minimize or eliminate the visible emissions.

The above information shall be provided as an attachment to the PER. If there are no day(s) and/or corrective action(s) to identify as required above, the permittee shall indicate within the "Additional Information and Corrections" section of the PER that no visible emissions were observed and no corrective actions were taken.

- (8) The permittee shall notify in writing the appropriate District Office or local air agency prior to operating this emissions unit under any of the following conditions:
  - a. Operate under a physical change or change in the method of operation as specified in d)(10) which results in a determination that the change would NOT constitute a modification as defined in OAC rule 3745-31-01; and

The permittee should be advised that in accordance with OAC rule 3745-15-04, the Director may require emission testing under such conditions.

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 Limitations:

NO<sub>x</sub> emissions while burning natural gas shall not exceed 0.026 pound per ton; NO<sub>x</sub> emissions while burning propane, on-spec used oil or number 2 fuel oil shall not exceed 0.055 pound per ton; NO<sub>x</sub> emissions while burning number 4 fuel oil shall not exceed 0.062 pound per ton; SO<sub>2</sub> emissions while burning natural gas or propane shall not exceed 0.0034 pound per ton; SO<sub>2</sub> emissions while burning on-spec used oil or number 2 fuel oil shall not exceed 0.058 pound per ton; SO<sub>2</sub> emissions while burning number 4 fuel oil shall not exceed 0.11 pound per ton; SO<sub>2</sub> emissions while burning slag shall not exceed 0.53 pound per ton in addition to the emissions from the permitted fuel; CO emissions while burning any



approved fuel shall not exceed 0.13 pound per ton; VOC emissions shall not exceed 0.10 pound per ton; and PE emissions while burning any approved fuel shall not exceed 0.033 pound per ton or 0.03 gr/dscf of exhaust gas.

Applicable Compliance Method:

The permittee shall determine compliance with the emission limitations above in accordance with the emission testing requirements in f)(2).

b. Emission Limitation:

PE emissions shall not exceed 7.13 tons per rolling, 12-month period.

Applicable Compliance Method:

The annual emission limitation was developed by applying the following emission factors to the associated maximum (worst-case) process weight rates for drum mix asphalt plant activities that emit PE:

	Asphalt plant activity	Maximum Process Weight Rate (tons per year)	PE Emission Factor (lb/ton asphalt produced)	Emission Factor (EF) Citation
*Cold end fugitive emissions	Aggregate transfer	138,937	0.0069	AP-42 Table 11.12-2 (06/06)
	Sand transfer	92,625	0.0021	AP-42 Table 11.12-2 (06/06)
	Hopper loading	308,750	0.0048	AP-42 Table 11.12-2 (06/06)
	RAP	77,187	0.0069	AP-42 Table 11.12-2 (06/06)
Hot end fugitive emissions	Silo filling	325,000	0.000586	Predictive EF Equation, AP-42 Table 11.1-14 (3/04)
	Plant load out	325,000	0.000522	Predictive EF Equation, AP-42 Table 11.1-14 (3/04)
Stack emissions	Plant operation	325,000	0.033	AP-42, Table 11.1-3(3/04)

\* Emissions of fugitive dust associated with the cold end fugitive emissions are based on a 95% production throughput of 325,000 tpy therefore: hopper loading (308750tpy), aggregate transfer 45% (138,937tpy), sand transfer 30% (92,625tpy) and RAP transfer 25% (77,187tpy).

The maximum (worst-case) process weight rates are based on the annual asphalt production restriction of 325,000 tons per rolling 12-month period contained in c)(2). Therefore, provided compliance is shown with the throughput



operational restrictions of this permit, compliance with the annual emission limitations shall be demonstrated.

c. Emission Limitation:

NO<sub>x</sub> emissions shall not exceed 10.10 tons per rolling, 12-month period.

Applicable Compliance Method:

Compliance shall be determined by multiplying the observed emission rate from the most recent emission 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 for each fuel, in tons per rolling 12-month period [as derived from the records required by d)(3)], summing the results for all fuels, and dividing by 2000.

d. Emission Limitation:

SO<sub>2</sub> emissions shall not exceed 24.0 tons per rolling, 12-month period.

Applicable Compliance Method:

Compliance shall be determined by multiplying the observed emission rate from the most recent emission testing, in pounds of SO<sub>2</sub> 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)(3)], summing the results for all fuels, and dividing by 2000.

e. Emission Limitation:

CO emissions shall not exceed 21.55 tons per rolling, 12-month period.

Applicable Compliance Method:

The annual emission limitation was developed by applying the following emission factors to the associated maximum (worst-case) process weight rates for drum mix asphalt plant activities that emit CO:

	Asphalt plant activity	Maximum Process Weight Rate (tons per year)	CO Emission Factor (lb/ton asphalt produced)	Emission Factor (EF) Citation
Hot end fugitive emissions	Silo filling	325,000	0.00118	Predictive EF Equation, AP-42 Table 11.1-14 (3/04)
	Plant load out	325,000	0.00135	Predictive EF Equation, AP-42 Table 11.1-14 (3/04)



	Asphalt plant activity	Maximum Process Weight Rate (tons per year)	CO Emission Factor (lb/ton asphalt produced)	Emission Factor (EF) Citation
Stack emissions	Plant operation	325,000	0.13	AP-42 Table 11.1-7 (03/04)

The maximum (worst-case) process weight rates are based on the annual asphalt production restriction of 325,000 tons per rolling 12-month period contained in c)(2). Therefore, provided compliance is shown with the throughput operational restrictions of this permit, compliance with the annual emission limitations shall be demonstrated.

f. Emission Limitation:

VOC emissions shall not exceed 18.91 tons per rolling, 12-month period.

Applicable Compliance Method:

The annual emission limitation was developed by applying the following emission factors to the associated maximum (worst-case) process weight rates for drum mix asphalt plant activities that emit VOC:

	Asphalt plant activity	Maximum Process Weight Rate (tons per year)	VOC Emission Factor (lb/ton asphalt produced)	Emission Factor (EF) Citation
Hot end fugitive emissions	Silo filling	325,000	0.0122	Predictive EF Equation, AP-42 Table 11.1-14 (3/04)
	Plant load out	325,000	0.0042	Predictive EF Equation, AP-42 Table 11.1-14 (3/04)
Stack emissions	Plant operation	325,000	0.10	Based on 2009 BAT template

The maximum (worst-case) process weight rates are based on the annual asphalt production restriction of 325,000 tons per rolling 12-month period contained in c)(2). Therefore, provided compliance is shown with the throughput operational restrictions of this permit, compliance with the annual emission limitations shall be demonstrated.



g. Emission Limitation:

Visible emissions of fugitive dust shall be less than or equal to 10 percent opacity, as a 3-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 of 40 CFR, Part 60, Appendix A and the modifications listed in paragraphs (B)(3)(a) and B)(3)(b) of OAC rule 3745-17-03.

h. Emission Limitation:

Visible particulate emissions from the stack shall not exceed 20 percent opacity, or greater.

Applicable Compliance Method:

Upon request by the appropriate Ohio EPA District Office or local air agency, visible PE shall be determined according to USEPA Method 9 of 40 CFR, Part 60, Appendix A.

i. 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:

Upon request by the appropriate Ohio EPA District Office or local air agency, visible particulate emissions shall be determined according to USEPA Method 22 of 40 CFR, Part 60, Appendix A.

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

a. Emission testing shall be conducted to demonstrate compliance with the emission limitations listed in f)(1)a.

b. Emission testing shall be conducted no later than a date 120 days after the facility produces asphalt in a single day of operation that exceeds the calculated amount below, except as otherwise provided in f)(2)e.:

$$\text{TPD} > (5.4)(\text{PMH})$$

Where:

TPD = asphalt production in a single day of operation;



5.4 = a factor equating to 6 hours of production at a 90% process weight rate (achieving this level of production would be sufficient for fulfilling testing requirements contained in this permit); and

PMH = permitted maximum ton per hour production level for the asphalt plant.

[Emission testing conducted May 23-24, 2013 while running on spec used oil fulfills the testing requirement to test 120 days after the issuance of this permit.]

- c. The emission testing requirement in f)(2)b. above shall not extend beyond 12 months from the issuance date of this permit, except as otherwise provided in f)(2)f.
- d. Emission testing for the use of any secondary fuels and/or slag shall be conducted within 60 days after the switch to the secondary fuel or when slag is incorporated into the mix design, except as otherwise provided in f)(2)e.
- e. Testing time frame(s) specified above may be amended or waived for cause upon prior request of, and written approval from, the Ohio EPA Northwest District Office. Any request to amend or waive the emission testing requirements of this permit must be received at least 30 days prior to required stack testing dates contained in this permit.
- f. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for PE, VOC, CO, NO<sub>x</sub>, and SO<sub>2</sub> for the primary fuel. Prior to secondary fuel use emission testing, the permittee shall consult the appropriate Ohio EPA District Office or local air agency to determine which pollutants should be tested.

It should be noted that the PE testing is being required to demonstrate compliance with the specified PE limitation and is not intended for the purpose of fulfilling or conforming with "New Source Performance Standard" (NSPS) requirements under 40 CFR Part 60.8.

- g. 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 18, 25 or 25A, as applicable, of 40 CFR Part 60, Appendix A

The VOC pounds per hour emission rate observed during the emission test shall be calculated in accordance with OAC rule 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).

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

- h. The test(s) shall be conducted at a Maximum Source Operating Rate (MSOR), unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency. MSOR is defined as the condition that is most likely to challenge the emission control measures with regards to meeting the applicable emission standard(s). Although it generally consists of operating the emissions unit at its maximum material input/production rates and results in the highest emission rate of the tested pollutant, there may be circumstances where a lower emissions loading is deemed the most challenging control scenario. Failure to test at the MSOR is justification for not accepting the test results as a demonstration of compliance.

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.

(3) Burner Tuning

- a. Introduction

The permittee shall submit a "burner tuning procedure" to the appropriate Ohio EPA district office, for this facility thirty days after receiving this permit to install. 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 NO<sub>x</sub>, 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 emission 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)(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)(3)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.
- vi. Submit a copy of all *Burner Tuning Reporting Form(s) for Asphalt Concrete Plants* 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.

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) Used Oil Analyses

The metal content for arsenic, cadmium, chromium, lead, and mercury shall be analyzed using a "Total Analysis" or "Total Metals" testing methodology. The metal contents shall not be analyzed using a leachate procedure such as the "Toxicity Characteristic Leaching Procedure" or "Extraction Procedure Toxicity Test". Chapter 2 of "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods" (SW-846, 3<sup>rd</sup> Edition, most current update) shall be used for selecting the appropriate test methods for the used oil analyses.



g) Miscellaneous Requirements

- (1) The permittee may relocate the portable source within the State of Ohio without first obtaining a permit to install and operate (PTIO) or a permit to install (PTI), providing the appropriate exemption requirements have been met and following approval of the Director (the Northwest District Office). The Director may issue a "Notice of Site Approval" if the following criteria are met, pursuant to the permanent exemption for portable sources in OAC rule 3745-31-03(A)(1):
  - a. the portable source is operated in compliance with any applicable best available technology (BAT) determination issued in a permit and all applicable state and/or federal rules and laws;
  - b. the portable source is operating pursuant to a currently effective PTIO or PTI and/or permit to operate (PTO) and continues to comply with the requirements of the permit;
  - c. the permittee has provided a minimum of 30 days' notice of the intent to relocate the portable source to the permitting authority (the Northwest District Office) prior to the scheduled relocation;
  - d. the Ohio EPA district office or local air agency having jurisdiction over the new site has determined that the permitted emissions would not cause a nuisance and would be acceptable under OAC rule 3745-15-07; and
  - e. the Director has issued a "Notice of Site Approval" stating that the proposed site is acceptable and the relocation of the portable source, along with any supporting permitted emissions would not result in the installation of a major stationary source or a modification of an existing major stationary source at the new site.

The portable source can be relocated upon receipt of the Director's Notice of Site Approval.

- (2) If the relocation of the portable source would result in the installation of a major source or the modification of a major source, as defined in OAC rule 3745-31-01, the permittee shall submit an application and obtain a PTIO or PTI (as applicable) for the new location prior to moving the portable source.

When a portable source is located at a stationary source or at a site with multiple portable sources, the potential emissions of the portable source may be required to be added to that of the facility in order to determine the potential to emit for Title V and PSD applicability. Relocation of any portable source that results in the creation of a major source as defined in OAC rule 3745-77-01, must also meet all applicable requirements under the Title V program contained in OAC rule 3745-77, which may include the requirement to apply for a Title V permit.

The Notice of Intent to Relocate shall be submitted to the Ohio EPA District Office responsible for issuing the permits for the portable source. Upon receipt of the notice, the permitting office shall notify the appropriate Ohio EPA District Office or local air agency having jurisdiction over the new site. Failure to submit said notification or failure



**Draft Permit-to-Install and Operate**

Gerken Materials, Inc.

**Permit Number:** P0112150

**Facility ID:** 0335980007

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

to receive Ohio EPA approval prior to relocation of the portable source may result in fines and civil penalties.

- (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 <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.



**Draft Permit-to-Install and Operate**

Gerken Materials, Inc.

**Permit Number:** P0112150

**Facility ID:** 0335980007

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: