Ohio Environmental Protection Agency
John R. Kasich, Governor
Mary Taylor, Lt. Governor
Scott J. Nally, Director

Certified Mail

4/27/2011

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

JIM SCHEUB
GERKEN MATERIALS INC - PLANT 20
9072 U.S. Route 24
Napoleon, OH 43545

RE: FINAL AIR POLLUTION PERMIT-TO-INSTALL AND OPERATE
Facility ID: 0335980002
Permit Number: P0107368
Permit Type: Renewal
County: Williams

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, Northwest District Office at (419)352-8461 or the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469. This permit can be accessed electronically on the DAPC Web page, www.epa.ohio.gov/dapc, by clicking the "Issued Air Pollution Control Permits" link.

Sincerely,

Michael W. Ahern

Michael W. Ahern, Manager

Permit Issuance and Data Management Section, DAPC

Cc: Ohio EPA-NWDO

Ohio | Environmental Protection Agency

FINAL

Division of Air Pollution Control
Permit-to-Install and Operate
for
GERKEN MATERIALS INC - PLANT 20

Facility ID:	0335980002
Permit Number:	P0107368
Permit Type:	Renewal
Issued:	4/27/2011
Effective:	4/27/2011
Expiration:	4/27/2016

Ohio Environmental Protection Agency

Division of Air Pollution Control
Permit-to-Install and Operate
for
GERKEN MATERIALS INC - PLANT 20

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 Plant 20 11

Authorization

Facility ID: 0335980002
Application Number(s): M0001076
Permit Number: P0107368
Permit Description: The purpose of this permit is for the administrative modification of PTI #03-17424, issued June 5, 2008 to increase the emission limitations based on stack test results. In addition, this administrative permit modification includes updating the terms and conditions for use of slag in the aggregate mix.
Permit Type: Renewal
Permit Fee: $0.00
Issue Date: 4/27/2011
Effective Date: 4/27/2011
Expiration Date: 4/27/2016
Permit Evaluation Report (PER) Annual Date: Jan 1 - Dec 31, Due Feb 15

This document constitutes issuance to:

GERKEN MATERIALS INC - PLANT 20
STATE RTE 15
Pioneer, OH 43554

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, 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

Scott J. Nally
Director

Authorization (continued)

Permit Number: P0107368
Permit Description: The purpose of this permit is for the administrative modification of PTI #03-17424, issued June 5, 2008 to increase the emission limitations based on stack test results. In addition, this administrative permit modification includes updating the terms and conditions for use of slag in the aggregate mix.

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:	HMA Plant 20
Superseded Permit Number:	03-17424
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, 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[1] 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.

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

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, HMA Plant 20

Operations, Property and/or Equipment Description:

250 TPH, counter-flow, drum-mix asphalt plant with a 47,000 ACFM baghouse

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)(10).

(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)f., b)(2)g., b)(2)h., b)(2)i., c)(1), c)(2), c)(4), c)(5), c)(7), d)(1), d)(3), d)(4), e)(1), f)(1)b., f)(1)c., f)(1)d., f)(1)e., f)(1)f, f)(1)j., and f)(1)k.

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)(a)	<u>Stack emissions</u>: Nitrogen oxides (NOx) emissions, while burning natural gas or propane, shall not exceed 0.026 pounds per ton of asphalt produced NOx emissions, while burning on-spec used oil or fuel oil, shall not exceed 0.089 pounds per ton of asphalt produced Sulfur dioxide (SO_2) emissions, while burning natural gas or propane, shall not exceed 0.0034 pounds per ton of asphalt produced SO_2 emissions, while burning on-spec used oil or fuel oil, shall not exceed 0.058 pounds per ton of asphalt produced

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		SO_2 emissions, while employing slag in the mix, shall not exceed 0.530 pounds per ton of slag applied in addition to the emissions generated while burning any permitted fuel [See c)(7)] Carbon monoxide (CO) emissions, while burning any approved fuel, shall not exceed 0.158 pounds per ton of asphalt produced Volatile organic compound (VOC) emissions, while burning any approved fuel, shall not exceed 0.160 pounds per ton of asphalt produced Visible PE of fugitive dust shall not exceed 10% opacity, as a 3-minute average [except as provided in b)(2)e.] See b)(2)b. through b)(2)i.
b.	OAC rule 3745-31-05(D)	<u>Stack emissions</u>: NOx emissions shall not exceed 13.35 tons per rolling, 12-month period SO_2 emissions shall not exceed 55.00 tons per rolling, 12-month period CO emissions shall not exceed 23.70 tons per rolling, 12-month period VOC emissions shall not exceed 24.00 tons per rolling, 12-month period PE emissions shall not exceed 9.67 tons per rolling, 12-month period See b)(2)a. <u>Cold End Fugitive Dust Emissions</u> PE of fugitive dust associated with the cold aggregate, slag, sand and RAP loading, and the cold aggregate, slag, sand and RAP transfer operations shall not exceed 2.12 tons of fugitive dust per rolling, 12-month period

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		<u>Asphalt Silo Filling Emissions</u> Emissions from the silo filling operations shall not exceed 0.18 tons of CO per rolling, 12-month period, 0.09 tons of PE per rolling, 12-month period and 1.80 tons VOC per rolling, 12-month period <u>Asphalt Load Out Emissions</u> Emissions from load out operations shall not exceed 0.20 tons CO per rolling, 12-month period, 0.08 tons PE per rolling, 12-month period and 0.60 tons VOC per rolling, 12 month period
c.	OAC rule 3745-17-07(A)	See b)(2)j.
d.	OAC rule 3745-17-07(B)	See b)(2)k.
e.	OAC rule 3745-17-08(B)	See b)(2)l.
f.	OAC rule 3745-17-11(B)	See b)(2)j.
g.	OAC rule 3745-18-06(E)	See b)(2)m.
h.	40 CFR Part 60, Subpart I	Particulate emissions (PE) shall not exceed 0.04 grains per dry standard cubic foot (gr/dscf) PE from the baghouse stack shall not exhibit 20% opacity, or greater See b)(2)n.

(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 b)(1)c. and are based on requirements contained in b)(2)f. through b)(2)i. and the operational restriction contained in c)(2).

It should be noted that hot mix asphalt plants are not specified as a stationary source that must include fugitive emissions in any major source determination and/or new source review requirement.

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.

f. 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.

g. All number 4 fuel oil burned in this emission unit shall have a sulfur content equal to or less than 0.8 percent, by weight.

h. All number 6 fuel oil burned in this emission unit shall have a sulfur content equal to or less than 1.0 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 oilmeets 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 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 shallalso 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, 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.

**DHWM 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 40 CFR Part 60, Subpart I.

k. This emissions unit is exempt from the visible particulate emission limitations for fugitive dust, specified in OAC rule 3745-17-07(B), pursuant to OAC rule 3745-17-07(B)(11)(e), because the emissions unit is not located within areas identified in "Appendix A" of OAC rule 3745-17-08.

l. This emissions unit is not located within areas identified in "Appendix A" of OAC rule 3745-17-08, therefore, the requirements of OAC rule 3745-17-08(B), which requires the installation of reasonably available control measures to prevent fugitive dust, do not apply to this emissions unit pursuant to OAC rule 3745-17-08(A)(1).

m. The requirements of this rule are equivalent to or less stringent than the requirements of OAC rule 3745-31-05(A)(3)(a).

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

c) Operational Restrictions

(1) The permittee 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) This emissions unit has been in operation for more than 12-months and, as such, the permittee has existing records to generate the rolling, 12-month summation of the production rate, upon issuance of this permit. The maximum annual production rate for this emissions unit shall not exceed 300,000 tons, based upon a rolling, 12-month summation of the production rates.

a. the amount of asphalt produced and the SO_2 emissions are restricted by the following equation:

$[(0.0034)*(a) + (0.058)*(b) + (0.53)*(c)]/2000 \leq 55.00$ tons per rolling, 12-month period

Where:

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

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

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

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

(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 NOx. 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) in amounts not to exceed 50 percent of each asphalt mix produced. The permittee may not substitute other raw materials not specifically identified in the PTIO application submitted on February 20, 2008 without prior approval from Ohio EPA.

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 natural gas, propane, #2 fuel oil, #4 fuel oil, #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 paragraph f)(1)a.

(6) The emissions from this emissions unit shall be vented to a baghouse at all times the emissions unit is in operation. The discharge of the baghouse (i.e., the baghouse stack) shall be at a minimum of 32 feet above the ground, prior to commencing the use of slag.

(7) 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.

(8) The amount of slag employed in the mix shall not exceed, at anytime3,500 tons per day.

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 5years.

(2) The permittee shall maintain daily records of the following information:

a. the type of slag used, in tons; and

b. the maximum amount, in percent, of RAP and/or shingles used in any mix.

(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. during the first 12 calendar months of operation, the permittee shall record the cumulative asphalt production, in tons, and the asphalt production by fuel type, in tons;

c. the type of slag used, i.e. size classification;

d. the total slag usage, in tons;

e. the maximum amount, in percent, of RAP and/or shingles used in any mix;

f. the rolling, 12-month summation of the asphalt production, in tons and the asphalt production by fuel type, in tons;

g. the rolling, 12-month summation, in tons, of the PE, SO_2*, NOx, OC, and CO emissions.

* The rolling, 12-month summation of SO_2 shall be calculated by using the equation in c)(2)a.

(4) 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.

(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.

(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)(7)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)(1)). 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) 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 daily basis. 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.

(10) Modeling to demonstrate compliance with, the "Toxic Air Contaminant Statute", ORC 3704.03(F)(4)(b), was not necessary because the emissions unit's maximum annual emissions for each toxic air contaminant, as defined in OAC rule 3745-114-01, will be

less than 1.0 ton per year. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any toxic air contaminant to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new permit to install.

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. the rolling, 12-month production limitation for this emissions unit;

ii. the slag restrictions: 1.75% sulfur content as listed in c)(7);

iii. the rolling, 12-month total PE, SO_2, NOx, VOC, and CO emission limitations; and

iv. the sulfur content limitations: 0.5%, 0.8%, 1.0%, as listed in b)(2)f through b)(2)h.

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, thepermittee 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) Annual Permit Evaluation Report (PER)forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

[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.]

(3) The permittee shall identify the following information in the annual PER in accordance with the monitoring requirements for visible emissions in term number d)(6) and d)(7) above:

a. all days during which any visible particulate emissions from the stack or visible fugitive particulate emissions from non stack egress points were observed; and

b. any corrective actions taken to minimize or eliminate the visible particulate emissions from the stack or visible fugitive particulate emissions from non stack egress points.

(4) The permittee shall identify in the annual permit evaluation report the following information concerning the operations of the baghouse during the 12-month reporting period for these emissions units:

a. each period of time (start time and date, and end time and date)when the pressure drop across the baghouse was outside of the acceptable range;

b. any period of time (start time and date, and end time and date)when the emissions unit(s) was/were in operation and the process emissions were not vented to the baghouse;

c. each incident of deviation described in e)(4)a. (above) where a prompt investigation was not conducted;

d. each incident of deviation described in e)(4)a. where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and

e. each incident of deviation described in e)(4)a. where proper records were not maintained for the investigation and/or the corrective action(s), as identified in the monitoring and record keeping requirements of this permit.

(5) 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.

(6) 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.

f) Testing Requirements

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

a. <u>Emission Limitations</u>:

NO_x emissions while burning natural gas or propane shall not exceed 0.026 pounds per ton; NO_x emissions while burning on-spec used oil fuel oil shall not exceed 0.089 pounds per ton; SO_2 emissions while burning natural gas or propane shall not exceed 0.0034 pounds per ton; SO_2 emissions while burning on-spec used oil or fuel oil shall not exceed 0.058 pounds per ton; SO_2 emissions, while employing slag in the mix, shall not exceed 0.530 pounds per ton of slag applied in addition to the emissions generated while burning any permitted fuel; CO emissions while burning any approved fuel shall not exceed 0.158 pounds per ton; VOC emissions shall not exceed 0.160 pounds per ton; and particulate emissions (PE) shall not exceed 0.04 gr/dscf.

<u>Applicable Compliance Method</u>:

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

i. The emission testing shall be conducted within 120 days after the issuance of this permit or after beginning operation whichever date is later. Emissions testing for secondary fuels shall be conducted within 60 days after the switch to the secondary fuel. Emissions testing shall be necessary for each fuel type used only once per permitting cycle.

Emissions testing for slag use in the mix shall be conducted within 60 days after initially employing slag if slag was not used during the initial test for the permit cycle. If sand slag is used, emissions testing for sand slag use in the mix shall be conducted within 60 days after the initially employing sand slag if slag is used after the initial testing for the permit cycle.

[Gerken Materials, Inc. conducted emissions testing on October 27, 2010 to demonstrate compliance with the NOx, SO_2, VOC, CO and PE emission limits of the Permit to Install #03-17424, issued June 5, 2008. This permit action is an administrative modification of PTI #03-17424 and the results of the testing event shall be sufficient to meet the initial testing requirements of this permit.]

ii. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for PE, VOC, CO, NOx and SO_2 for the primary fuel and slag use, if applicable. Prior to secondary fuel or slag use emissions testing, the permittee shall consult the appropriate Ohio EPA District Office or local air agency to determine which pollutants should be tested.

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

PE, Methods 1-4 and 5 of 40 CFR Part 60, Appendix A.

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

SO_2, Methods 1-4 and 6 or 6C of 40 CFR Part 60, Appendix A

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

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

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

iv. The test(s) shall be conducted while this emissions unit is operating at or near its maximum capacity and burning natural gas, propane, number 2 fuel oil, number 4 fuel oil, number 6 fuel oil, or on-spec used oil for PE, VOC, CO, NOx and SO_2 and employing RAP to verify VOC emissions,

unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

v. Following the initial emissions testing specified in f)(1)a.i., additional emissions testing shall be conducted during the third production season following the initial emissions test (or most recent compliance demonstration), unless otherwise approved or required by the Ohio EPA District Office.

[Note: In the event that a renewal action is not issued for emissions unit P901 upon expiration of this permit, the testing requirements (and frequency) shall apply until a renewal permit is issued final.

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.]

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.

b. Emission Limitation:

PE emissions shall not exceed 9.67 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 grains (gr) of PE per dry standard cubic foot (dscf) by a maximum baghouse flow rate of 47,000 actual cubic feet per minute by a conversion factor of 60 minutes per hour by a conversion factor of 1 pound

per 7000 grain by a maximum hourly production rate of 250 tons by the actual rolling 12-month summation of asphalt produced and dividing by 2000.

c. Emission Limitation:

VOC emissions shall not exceed 24.00 tons per rolling, 12-month period.

Applicable Compliance Method:

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

d. Emission Limitation:

CO emissions shall not exceed 23.70 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, by the actual rolling 12-month summation of asphalt produced, in tons per rolling 12-month period [as derived from the records required by term and condition d)(2)], and dividing by 2000.

e. Emission Limitation:

SO_2 emissions shall not exceed 55.00 tons per rolling, 12-month period.

Applicable Compliance Method:

Compliance shall be determined by calculating the emissions using the equation in c)(2)a. [as derived from the records required by d)(3)].

f. Emission Limitation:

NO_x emissions shall not exceed 13.35 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 NOx 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 dividing by 2000.

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.

h. 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 9 of 40 CFR, Part 60, Appendix A.

i. 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.

j. Emission Limitation:

PE of fugitive dust associated with the cold aggregate, sand and RAP loading, and the cold aggregate, sand and RAP transfer operations shall not exceed 2.12 tons of PE per rolling 12-month period.

Applicable Compliance Method:

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

Fugitives emissions from the cold end are calculated as follows [AP-42-5th Edition, Table 11.12-2 (6/06)]

Hopper loading:

300,000 tons of material/year X 0.0051 lb PE/ton of material = 1530 lbs PE/yr

Aggregate transfer:

300,000 tons of aggregate/year X 0.0069 lb PE/ton of aggregate = 2070 lbs PE/yr

Sand transfer:

300,000 tons of sand/year X 0.0021 lb PE/ton of sand = 630 lbs PE/yr

The sum of the above is 4230 lbs PE/yr X 1 ton/2000 lbs = 2.12 tons of PE

k. Emission Limitation:

Asphalt Load Out and Silo Filling Emissions

Emissions from load out operations shall not exceed 0.20 ton CO per rolling 12-month period, 0.08 ton PE per rolling 12-month period and 0.60 tons of VOC per rolling 12-month period.

Emissions from silo filling operations shall not exceed 0.18 ton CO per rolling, 12-month period, 0.09 ton PE per rolling 12-month period, and 1.80 tons VOC per rolling 12-month period.

Applicable Compliance Method:

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

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 percent of TOC is not VOC (AP-42 Table 11.1-16 dated 3/2004

For plant load out, 7.3 percent 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 300,000 tons/yr production)
Silo filling	PE	5.86×10^{-4}	0.09
Load out	PE	5.22×10^{-4}	0.08
Silo filling	VOC	1.2×10^{-2}	1.80
Load out	VOC	3.86×10^{-3}	0.60
Silo filling	CO	1.18×10^{-3}	0.18
Load out	CO	1.35×10^{-3}	0.20

(2) Burner Tuning

a. Introduction

The permittee shall submit a "burner tuning procedure" to Ohio EPA, Central 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 NOx, O_2 and CO in the stack exhaust gases from this emissions unit. The monitor(s) shall be capable of measuring the expected concentrations of the measured gases. The monitoring equipment shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall maintain records of each portable monitoring device's calibration.

d. Burner Tuning Procedure

The first steps concerning burner tuning involve setting the pollutant baseline levels (concentrations) utilizing the portable monitor. These baselines shall be set during the initial U.S. EPA approved emissions testing that demonstrated the emissions unit was in compliance with all applicable emissions limitations as described in f)(1). The baselines shall be determined for NOx, and CO. Sampling should measure the exhaust gas values exiting the dryer or thebaghouse. 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)(1)) in the "Recent Stack Test Basis Values" column.

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

i. Review the plant operations to ensure the plant is operating normally.

ii. Confirm that the portable monitor is calibrated per the manufacturer's specifications.

iii. Using the calibrated monitor and the monitor manufacturer's recommended sampling duration, measure the stack exhaust gas values for O_2, NOx, and CO. These measurements shall be taken at the same location as the location where the baseline samples were taken. Record the values in the "Pre-Tuning" results column on the *Burner Tuning Reporting Form for Asphalt Concrete Plants* form.

iv. Compare the measured stack exhaust gas values with the pollutant baseline values. If all of the measured stack exhaust gas values are equal to or less than 115 percent of the pollutant baseline values, then it is not necessary to tune the burner. Go on to Section v. below.

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

v. Once all of the measured stack exhaust gas values are within the 115 per cent of the pollutant baseline values, record the measured stack exhaust gas values in the "Post Tuning" results column on the *Burner Tuning Reporting Form for Asphalt Concrete Plants* form.

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.

(3) 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, 3rd Edition, most current update) shall be used for selecting the appropriate test methods for the used oil analyses.

g) Miscellaneous Requirements

(1) Burner Tuning Form (see next page)

Ohio Environmental Protection Agency

Final Permit-to-Install and Operate
GERKEN MATERIALS INC - PLANT 20
Permit Number: P0107368
Facility ID: 0335980002

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)			

[1]These 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: