



John R. Kasich, Governor
Mary Taylor, Lt. Governor
Craig W. Butler, Director

10/28/2016

Certified Mail

Jeff Payne
 Barrett Paving - Middletown Asphalt
 3751 Commerce Drive
 Middletown, OH 45005

No	TOXIC REVIEW
Yes	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

RE: FINALAIR POLLUTION PERMIT-TO-INSTALL AND OPERATE

Facility ID: 1409010131
 Permit Number: P0118215
 Permit Type: Renewal
 County: Butler

Dear Permit Holder:

Enclosed please find a final Ohio Environmental Protection Agency (EPA) 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. In this letter you will find the information on the following topics:

- **How to appeal this permit**
- **How to save money, reduce pollution and reduce energy consumption**
- **How to give us feedback on your permitting experience**
- **How to get an electronic copy of your permit**
- **What should you do if you notice a spill or environmental emergency?**

How to appeal this permit

The issuance of this PTIO 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
 77 South High Street, 17th Floor
 Columbus, OH 43215

How to save money, reduce pollution and reduce energy consumption

The Ohio EPA is encouraging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Compliance Assistance and Pollution Prevention at (614) 644-3469. Additionally, all or a portion of the capital expenditures related to installing air pollution control equipment under this permit may be eligible for financing and State tax exemptions through the Ohio Air Quality Development Authority (OAQDA) under Ohio Revised Code Section 3706. For more information, see the OAQDA website: www.ohioairquality.org/clean_air

How to give us feedback on your permitting experience

Please complete a survey at www.epa.ohio.gov/survey.aspx and give us feedback on your permitting experience. We value your opinion.

How to get an electronic copy of your permit

This permit can be accessed electronically via the eBusiness Center: Air Services in Microsoft Word format or in Adobe PDF on the Division of Air Pollution Control (DAPC) Web page, www.epa.ohio.gov/dapc by clicking the "Search for Permits" link under the Permitting topic on the Programs tab.

What should you do if you notice a spill or environmental emergency?

Any spill or environmental emergency which may endanger human health or the environment should be reported to the Emergency Response 24-HOUR EMERGENCY SPILL HOTLINE toll-free at (800) 282-9378. Report non-emergency complaints to the appropriate district office or local air agency.

If you have any questions regarding your permit, please contact Southwest Ohio Air Quality Agency at (513)946-7777 or the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469.

Sincerely,



Michael E. Hopkins, P.E.
Assistant Chief, Permitting Section, DAPC

Cc: SWOQA



Response to Comments

Facility ID:	1409010131
Facility Name:	Barrett Paving - Middletown Asphalt
Facility Description:	Hot Mix Asphalt Production
Facility Address:	1515 14TH AVE MIDDLETOWN, OH 45042 Butler County
Permit:	P0118215, Permit-To-Install and Operate - Administrative Modification
A public notice for the draft permit issuance was published in the Ohio EPA Weekly Review and appeared in the Journal News on 09/20/2016. The comment period ended on 10/20/2016.	
Hearing date (if held)	NA
Hearing Public Notice Date (if different from draft public notice)	NA

The following comments were received during the comment period specified. Ohio EPA reviewed and considered all comments received during the public comment period. By law, Ohio EPA has authority to consider specific issues related to protection of the environment and public health. Often, public concerns fall outside the scope of that authority. For example, concerns about zoning issues are addressed at the local level. Ohio EPA may respond to those concerns in this document by identifying another government agency with more direct authority over the issue.

In an effort to help you review this document, the questions are grouped by topic and organized in a consistent format. PDF copies of the original comments in the format submitted are available upon request.

Comments from Barrett Paving, received 10/13/2016

1. Topic: Fuel Specific Hourly Emissions Limitations for VOC, SO2, and NOx in Section C.1. b)(1)a. and f)(1)a.

- a. Comment: This permit contains outdated emissions limits which are established in b)(1)a. for hourly emissions limitations per fuel type and the annual emissions limitations are established in b)(2)a. It is our understanding that Ohio EPA has committed to revising/correcting permits that did not properly evaluate BAT and that the emission limitations should be an individual rolling, 12-month limitation (based on the maximum worst-case hourly emissions rate). It is requested that Ohio EPA revise the applicable emissions limitations to include only the worst-case hourly emissions limitation and the annual rolling 12-month emission limitation, per pollutant, as was done with Barrett’s Reading and Camden facilities.

Response: Ohio EPA does not agree to make this change. The February 7, 2014 guidance document used to determine when and how to revise the format of a BAT limitation specifically states that the BAT format should be revised when the new installation of a unit or a Chapter 31 modification of a unit occurred on or after August 3, 2009. In the case of the Barrett Paving Materials – Middletown location, no modification meeting the definition in Chapter 31 has occurred on or after August 3, 2009. This permitting action is an Administrative Modification; therefore, the BAT format from the previous BAT evaluation is carried forward without revision.

2. Topic: Restriction of the hourly production level to 115% or less of the average hourly production level achieved during the most recent stack test in Section C.1. c)(6), d)(2), and e)(2)v.

- a. Comment: This plant is rated at 350 tons per hour (TPH) and with the 115% restriction, the plant could be operated up to 331.54 TPH. This operating restriction and the associated daily record keeping is a large burden in consideration of the very small, less than 20 TPH, difference between the maximum capacity and the arbitrary production restriction associated with stack testing. It is requested that Ohio EPA consider removal of this restriction and the associated record keeping due to the fact that it does not result in a benefit to the environment by restricting the hourly production rate to less than 20 tons of a maximum capacity that the plant has yet to achieve in the last 22 years.

Response: Ohio EPA does not agree to make this change. This is a standard term used in air permits when a unit operates such that 115% of the production level during the stack test is less than the rated capacity of the unit. This requirement is also supported by US EPA.

3. Topic: Emissions testing shall be conducted within 6 months after issuance of the permit for PE, NOx, CO, and VOC in Section C.1. f)(1)a.i.

- a. Comment: In accordance with meetings between Flexible Pavements of Ohio, Inc. and Ohio EPA (and in reviewing Ohio EPA air permits issued in the last year), it is our understanding that testing requirements have been standardized to testing only for PE, NOx, and CO for renewal air permitting. It is requested that Ohio EPA change the testing requirement to exclude VOC emissions. Additionally, the stack testing timing is requested to be changed to "within 90 days of startup of the 2017 production season". As this is a seasonal operation, 6 months from issuance of the permit could be May of 2017 which does not allow enough time for maximum production rates and acquiring stack testers within the 30-day notification period.

Response: Ohio EPA agrees to make this change. VOC emissions will be removed from the stack testing requirement found in f)(1)a.i. The permittee will still be required to conduct stack testing for PE, NOx, and CO; and for PE and opacity as appropriate to 40 CFR Part 60, under the requirements of term f)(1)a.i.

f)(1)a.i. will read as follows:

"The emission testing shall be conducted within 90 days following the startup of the 2017 production season for PE, NOx, and CO; and for PE and opacity where the tests shall be conducted in accordance with the appropriate provisions listed in 40 CFR Part 60."

No other comments were received.



FINAL

**Division of Air Pollution Control
Permit-to-Install and Operate
for
Barrett Paving - Middletown Asphalt**

Facility ID:	1409010131
Permit Number:	P0118215
Permit Type:	Renewal
Issued:	10/28/2016
Effective:	10/28/2016
Expiration:	10/28/2021



Division of Air Pollution Control
Permit-to-Install and Operate
for
Barrett Paving - Middletown Asphalt

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Final Permit-to-Install and Operate
Barrett Paving - Middletown Asphalt
Permit Number: P0118215
Facility ID: 1409010131
Effective Date: 10/28/2016

Authorization

Facility ID: 1409010131
Application Number(s): A0052409
Permit Number: P0118215
Permit Description: FEPTIO Renewal for Hot Mix Asphalt Plant including administrative modification to incorporate facility-requested changes and update emission factors.
Permit Type: Renewal
Permit Fee: \$0.00
Issue Date: 10/28/2016
Effective Date: 10/28/2016
Expiration Date: 10/28/2021
Permit Evaluation Report (PER) Annual Date: Jan 1 - Dec 31, Due Feb 15

This document constitutes issuance to:

Barrett Paving - Middletown Asphalt
1515 14TH AVE
MIDDLETOWN, OH 45042

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

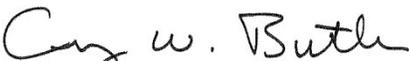
Ohio Environmental Protection Agency (EPA) District Office or local air agency responsible for processing and administering your permit:

Southwest Ohio Air Quality Agency
250 William Howard Taft Rd.
Cincinnati, OH 45219
(513)946-7777

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



Final Permit-to-Install and Operate
Barrett Paving - Middletown Asphalt
Permit Number: P0118215
Facility ID: 1409010131
Effective Date: 10/28/2016

Authorization (continued)

Permit Number: P0118215

Permit Description: FEPTIO Renewal for Hot Mix Asphalt Plant including administrative modification to incorporate facility-requested changes and update emission factors.

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

Emissions Unit ID:	P902
Company Equipment ID:	Middletown Drum
Superseded Permit Number:	P0109024
General Permit Category and Type:	Not Applicable



Final Permit-to-Install and Operate
Barrett Paving - Middletown Asphalt
Permit Number: P0118215
Facility ID: 1409010131
Effective Date: 10/28/2016

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 [DO/LAA] 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.



Final Permit-to-Install and Operate
Barrett Paving - Middletown Asphalt
Permit Number: P0118215
Facility ID: 1409010131
Effective Date: 10/28/2016

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.
2. The following emissions unit contained in this permit is subject to 40 CFR Part 60, Subpart I: P902. The complete NSPS requirements may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website <http://www.ecfr.gov> or by contacting the appropriate Ohio EPA District Office or Local air agency.



Final Permit-to-Install and Operate
Barrett Paving - Middletown Asphalt
Permit Number: P0118215
Facility ID: 1409010131
Effective Date: 10/28/2016

C. Emissions Unit Terms and Conditions



1. P902, Middletown Drum

Operations, Property and/or Equipment Description:

350 TPH Counterflow Drum / Twin Shaft Mixer Hot Mix Asphalt Plant

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. None.

(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)b., d)(3), e)(2)a.i.-ii., f)(1)c.-h., and f)(3).

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)	Particulate emissions (PE ¹) from the stack shall not exceed 11.4 pounds per hour when burning gas or oil. Volatile organic compound (VOC) emissions shall not exceed 21.7 pounds per hour when burning oil. VOC emissions shall not exceed 9.84pounds per hour when burning gas. Sulfur dioxide (SO ₂) emissions shall not exceed 34.8 pounds per hour when burning oil. SO ₂ emissions shall not exceed 0.06

¹ In this permit, particulate emissions (PE) are being used as surrogate for both particulate matter 10 microns and less in diameter (PM₁₀) and particulate matter 2.5 microns and less in diameter (PM_{2.5}).

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		<p>pound per hour when burning gas.</p> <p>Nitrogen oxides (NOx) emissions shall not exceed 6.6 pounds per hour when burning gas.</p> <p>NOx emissions shall not exceed 15.5 pounds per hour when burning oil.</p> <p>Carbon monoxide (CO) emissions shall not exceed 88.2 pounds per hour when burning gas or oil.</p> <p>Visible particulate emissions from any stack shall not exceed 10% opacity, as a six-minute average.</p> <p>The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(B), OAC rule 3745-17-08(B), OAC rule 3745-31-05(D), and 40 CFR Part 60, Subpart I.</p>
b.	<p>OAC rule 3745-31-05(D)</p> <p>Synthetic Minor Limitations to Avoid PSD and Title V Applicability</p>	<p>See b)(2)a. and b)(2)b.</p>
c.	<p>40 CFR Part 60, Subpart I</p>	<p>No owner or operator subject to the provisions of this subpart shall discharge or cause the discharge into the atmosphere from any affected facility any gasses which contain PE in excess of 0.04 gr/dscf or exhibit 20 percent opacity, or greater.</p> <p>In accordance with 40 CFR Part 60, Subpart I, compliance with the gr/dscf emission limitation is demonstrated by testing for filterable particulate emissions only.</p> <p>See b)(2)c.</p>
d.	<p>OAC rule 3745-17-07(A)</p>	<p>The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to 40 CFR Part 60, Subpart I.</p>

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
e.	OAC rule 3745-17-07(B)	Visible PE of fugitive dust shall not exceed 20 percent opacity, as a three-minute average.
f.	OAC rule 3745-17-08(B)	See b)(2)e.
g.	OAC rule 3745-17-11(B)	The emission limitation established by this rule is less stringent than that established by OAC rule 3745-31-05(A)(3).
h.	OAC rule 3745-18-06(E)	The emission limitation established by this rule is less stringent than that established by OAC rule 3745-31-05(A)(3).

(2) Additional Terms and Conditions

a. The emissions from this emissions unit shall not exceed:

- i. 11.4 tons per year (TPY) of PE² from the stack, based upon a rolling, 12-month summation of the monthly emissions;
- ii. 5.2 tons per year (TPY) of fugitive PE³, based upon a rolling, 12-month summation of the monthly emissions;
- iii. 88.2 tons per year (TPY) of CO from the stack, based upon a rolling, 12-month summation of the monthly emissions;
- iv. 0.9 ton per year (TPY) of fugitive CO, based upon a rolling, 12-month summation of the monthly emissions;
- v. 21.7 tons per year (TPY) of VOC from the stack, based upon a rolling, 12-month summation of the monthly emissions;
- vi. 5.6 tons per year (TPY) of fugitive VOC, based upon a rolling, 12-month summation of the monthly emissions;
- vii. 15.5 tons per year (TPY) of NO_x, based upon a rolling, 12-month summation of the monthly emissions (stack emissions);
- viii. The amount of operating hours of the burner blower and the SO₂ emissions are restricted by the following equation:

$$((0.06 \text{ lb/hr}) \cdot (a) + (0.66 \text{ lb/hr}) \cdot (b) + (34.8 \text{ lbs/hr}) \cdot (c)) \leq 34.8 \text{ tons per year (TPY) of SO}_2 \text{, based upon a rolling, 12-month summation of the monthly emissions;}$$

²³In this permit, particulate emissions (PE) are being used as surrogate for both particulate matter 10 microns and less in diameter (PM₁₀) and particulate matter 2.5 microns and less in diameter (PM_{2.5}).



Where:

a = operating hours of the burner blower using natural gas per rolling, 12-month period;

b = operating hours of the burner blower using number 2 fuel oil and/or used oil per rolling, 12-month period;

c = operating hours of the burner blower using number 4 fuel oil per rolling, 12-month period; and

* = pounds per hour emission rates may be revised based upon Ohio EPA validated emissions testing and shall be revised if emissions testing results demonstrate higher emissions.

- b. The total operating hours of the burner blower using any fuel is limited to 2,000 hours per rolling, 12-month period. To ensure enforceability during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit following the startup of the emissions unit, the permittee shall not exceed the following hours of operation.

Month(s)	Maximum Allowable Cumulative Hours of Operation
1	900
1-2	1,800
1-3	2,000
1-4	2,000
1-5	2,000
1-6	2,000
1-7	2,000
1-8	2,000
1-9	2,000
1-10	2,000
1-11	2,000
1-12	2,000

After the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit following the startup of the emissions unit, compliance with the annual operating hours of the burner blower limitation shall

be based upon a rolling, 12-month summation of the monthly operating hours of the burner blower.

- c. The application and enforcement of the provisions of the New Source Performance Standards (NSPS), as promulgated by the United States Environmental Protection Agency, 40 CFR Part 60, are delegated to the Ohio Environmental Protection Agency. The requirements of 40 CFR Part 60 are also federally enforceable.
- d. Each shipment of used oil burned in this emissions unit shall be on-specification (on-spec) oil and shall meet the used oil specifications contained in OAC rule 3745-279-11. The permittee shall determine that the used fuel oil meets these specifications by performing analyses or obtaining copies of analyses or other information from the supplier documenting that the used fuel oil does not exceed (except for flash point which shall not fall below) the following limitations:

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

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 show 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.

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

- e. Appendix A, Area Fugitive Dust Control Measures
 - i. The drop height of the front end loader bucket shall be minimized to the extent possible in order to minimize or eliminate visible particulate emissions of fugitive dust from the aggregate storage bins.
 - ii. The aggregate loaded into the cold aggregate bins shall have a moisture content sufficient to minimize or eliminate visible particulate emissions of fugitive dust from conveyors and all transfer points to the dryer.

- iii. Installation and use of hoods, fans, and other equipment to adequately enclose, contain, capture, vent, and control fugitive dust. Such equipment shall be sufficient to minimize or eliminate visible particulate emissions of fugitive dust.
 - f. Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the emission limitations, annual operating hours of the burner blower limitation, use of a fabric filter, oil content limitations, maintaining the aggregate in a moist condition and compliance with 40 CFR Part 60, Subpart I.
 - g. All on-spec used oil burned in this emissions unit shall have a sulfur content equal to or less than 0.5% by weight.
 - h. The hourly emission limitations outlined in b)(1)a. are based upon the emissions unit's potential to emit. Therefore, no hourly records are required to demonstrate compliance with these limitations.
- c) Operational Restrictions
- (1) The permittee may substitute reclaimed asphalt pavement (RAP) and/or asphalt shingles in the raw material feed mix in amounts not to exceed 50 percent of all aggregate materials of each asphalt mix produced without conducting additional emissions testing as detailed in f)(1)a.iii. If compliance through emission testing is demonstrated for employing RAP in amounts exceeding 50 percent, the permittee may substitute RAP in the raw material feed mix in amounts not to exceed 75 percent of all aggregate materials of each asphalt mix produced. The permittee may not substitute other raw materials not specifically identified in this PTIO without prior approval from Ohio EPA.

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 supplier 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.
 - (2) The permittee is limited to burning only natural gas, Number 2 fuel oil, Number 4 fuel oil or used oil meeting the specifications listed in b)(2)d. In order to use a fuel, the permittee shall complete the emission testing for that fuel in f)(1)a.
 - (3) 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.
 - (4) Number 2 diesel fuel burned in this emissions unit shall meet U.S. EPA's specifications for Ultra Low Sulfur Diesel (ULSD) found in 40 CFR 80.510(c).

- (5) When a scheduled/planned fuel switch occurs, the permittee shall complete the emission testing required for that fuel in accordance with f)(1)a. and shall perform the burner tuning in accordance with f)(7)f.

In the event that the primary fuel supply is unexpectedly interrupted and an unscheduled/unplanned fuel switch is necessary, the permittee shall notify the appropriate Ohio EPA, District Office or Local Air Agency in their quarterly reports in e) below after each event that the primary fuel supply is unexpectedly interrupted and/or an unscheduled/unplanned fuel switch occurs.

- (6) The permittee shall restrict the hourly production level (averaged daily) for this emissions unit to 115% or less of the average hourly production level achieved during the most recent stack test that demonstrated compliance with the applicable emissions limitations. [During the most recent stack test that demonstrated compliance with the applicable emission limitations, the average hourly production level achieved was 288.3 tons per hour (June 30, 2011).]

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

- (1) The permittee shall properly install, operate, and maintain equipment to monitor and record the pressure drop in inches of water, across the baghouse during operation of this emissions unit, including periods of startup and shutdown. 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 in inches of water, across the baghouse on a daily basis.

Whenever the monitored value for the pressure drop deviates from the range specified below, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation: the date and time the deviation began and the magnitude of the deviation at that time, the date(s) the investigation was conducted, the names of the personnel who conducted the investigation, and 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 below, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken: a description of the corrective action, the date it was completed, the date and time the deviation ended, the total period of time (in minutes) during which there was a deviation, the pressure drop readings immediately after the corrective action, and the names of the personnel who performed the work. Investigation and records required by this paragraph does not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

The acceptable range for the pressure drop across the baghouse is 1 to 6 inches of water.

The range 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 range based upon information obtained during future particulate emission tests that demonstrate compliance with the allowable particulate emission rate for this emissions unit. In addition, approved revisions to the range 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.

- (2) The permittee shall maintain daily records of the following information:
 - a. the amount, in tons, of asphalt produced;
 - b. the operating hours of the emissions unit; and
 - c. the average operating rate, in tons per hour.

- (3) The permittee shall maintain monthly records of the following information for this emissions unit:
 - a. the record of the operating hours of the burner blower motor;
 - b. the hours of operation for each fuel type for each month;
 - c. the maximum percentage RAP or shingles used for any mix;
 - d. for the first 12 calendar months of operation or the first calendar months following the issuance of this permit following the startup of the emissions unit, the cumulative operating hours of the burner blower, calculated by adding the current month's operating hours of the burner blower to the operating hours of the burner blower for each calendar month since the startup on the emissions unit;
 - e. beginning after the first 12 calendar months or the first 12 calendar months following the issuance of this permit operation following the startup of the emissions unit, the rolling, 12-month summation of the operating hours of the burner blower and the hours of operation by fuel types, calculated by adding the current month's operating hours of the burner blower to the operating hours of the burner blower for the preceding eleven calendar months;
 - f. the rolling, 12-month summation of NO_x and SO₂* emissions by fuel type; and
 - g. the total rolling, 12-month summation of stack CO, fugitive CO, NO_x, SO₂*, stack VOC, fugitive VOC, stack PE, and fugitive PE emissions.

*The rolling, 12-month summation of SO₂ shall be calculated by using the equation found in b)(2)a.viii. above.

- (4) For each day during which the permittee burns a fuel other than natural gas, number 2 diesel fuel, on-spec used oil, or number 4 fuel oil, the permittee shall maintain a record of the type, percent sulfur content and the quantity of fuel burned in this emissions unit.

- (5) The permittee shall maintain documents provided by the oil supplier for each shipment of number 2 fuel oil to demonstrate compliance with the ULSD requirement. These documents must include the receipt or bill of lading that includes confirmation that the fuel meets the number 2 diesel fuel ULSD standard.
- (6) For each shipment of on-spec used oil and number 4 fuel 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.
- (7) The permittee shall install a non-resettable hour meter, if one is not already installed.
- (8) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack and for any visible emissions of fugitive dust from the egress points (i.e., building windows, doors, roof monitors, etc.) 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 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 emissions incident; and
 - e. any corrective actions taken to minimize or 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.
- (9) The permittee shall receive and maintain the chemical analyses from the supplier/marketer for each shipment of on spec. 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.

- (10) 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 Ohio EPA, District Office or local air agency.

e) Reporting Requirements

- (1) 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.

The permittee shall identify the following information in the annual permit evaluation report in accordance with the monitoring and/or recordkeeping requirements above:

- a. all days during which any visible particulate emissions were observed from the stack serving this emissions unit;

- b. all days during which any visible emissions of fugitive dust were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit;
 - c. any corrective actions taken to minimize or eliminate the visible particulate emissions from the stack and/or visible emissions of fugitive dust;
 - d. all exceedances of RAP and/or shingles raw material mix limitation;
 - e. any exceedance of the used oil standards in OAC rule 3745-279-11;
 - f. 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;
 - g. any exceedance of the limitations for mercury and/or PCBs;
 - h. any deviation from the minimum heat content of 135,000 Btu/gallon; and
 - i. all *Burner Tuning Reporting Form for Asphalt Concrete Plants* forms produced during the past calendar year shall be submitted to the appropriate Ohio EPA District Office or local air agency responsible for the permitting of the facility with the PER.
- (2) 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 operating hours of the burner blower and, for the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit operation following the startup of the emissions unit, all exceedances of the maximum allowable cumulative operating hours of the burner blower;
 - ii. all exceedances of the tons per rolling, 12-month period of stack CO, fugitive CO, NO_x, SO₂, stack VOC, fugitive VOC, stack PE, and fugitive PE emission limitations;
 - iii. all exceedances of the prohibition to utilize other than natural gas, number 2 fuel oil, number 4 fuel oil, and on-spec used oil;
 - iv. summation of all events when the primary fuel supply is unexpectedly interrupted and/or an unscheduled/unplanned fuel switch occurs; and
 - v. all instances of any daily record demonstrating that the hot mix asphalt plant's hourly production level (averaged daily) exceeded 115% of the average hourly production level achieved during the most recent stack



test that demonstrated compliance with the applicable emission limitations.

- b. the 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).

- (3) 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.

- (4) NSPS Reporting Requirements

The permittee shall comply with all applicable reporting requirements under 40 CFR Part 60, Subpart I, including the following sections:

60.7(a)(1)	Construction date (no later than 30 days after such date)
60.7(a)(3)	Actual start-up date (within 15 days after such date)



60.7(a)(4)	Increase in emissions rate (no later than 60 days before change is commenced)
60.7(a)(6)	Date of performance testing (no later than 30 days prior to testing)

(5) 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.

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:

PE from any affected facility shall not exceed 0.04 gr/dscf;

PE⁴ emissions shall not exceed 11.4 pounds per hour;

NO_x emissions shall not exceed 6.6 pounds per hour when burning gas;

NO_x emissions shall not exceed 15.5 pounds per hour when burning oil;

CO emissions shall not exceed 88.2 pounds per hour;

VOC emissions shall not exceed 21.7 pounds per hour when burning oil; and

VOC emissions shall not exceed 9.84 pounds per hour when burning gas.

Applicable Compliance Method:

⁴ In this permit, particulate emissions (PE) are being used as surrogate for both particulate matter 10 microns and less in diameter (PM₁₀) and particulate matter 2.5 microns and less in diameter (PM_{2.5}).

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 90 days following the startup of the 2017 production season for PE, NO_x, and CO; and for PE and opacity where the tests shall be conducted in accordance with the appropriate provisions listed in 40 CFR Part 60.
- ii. Emission testing for secondary fuels shall be conducted within 60 days after the switch to the secondary fuel. Secondary fuel use emissions testing shall be conducted to demonstrate compliance with allowable mass emission rates of PE, NO_x and CO.
- iii. Emission testing when employing RAP in excess of 50% but not to exceed 75% shall be conducted within 60 days after the increase in RAP to demonstrate compliance with the allowable mass emissions rate of VOC. The test shall be conducted while this emissions unit is operating at or near its maximum capacity while employing RAP in excess of 50%, and burning natural gas, number 2 fuel oil, number 4 fuel oil, or on-spec used oil for VOC, unless otherwise specified or approved by the appropriate Ohio EPA District Office or Local air agency.
- iv. The VOC pounds per hour emissions rate observed during the emissions test shall be calculated in accordance with OAC paragraph 3745-31-10(C)(7) where the average molecular weight of the VOC emissions equals 16, i.e., the VOC as carbon emission rate observed during testing shall be converted to the appropriate units by multiplying the VOC as carbon emission rate observed during testing by 16 and dividing by 12.
- v. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

PE (filterable only), Methods 1-5 and 9 of 40 CFR Part 60, Appendix A.

NO_x, Methods 1-4 and 7 or 7E 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.

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

During the emissions testing, the emissions unit shall be operated under operational conditions approved in advance by the appropriate Ohio EPA District Office or local air agency. Operational conditions that may need to be approved include, but are not limited to, the production rate, the type of material processed, material make-up (solvent content, etc.), or control equipment operational limitations (burner temperature, precipitator voltage, etc.). In general, testing shall be done under "worst case"

conditions expected during the life of the permit. As part of the information provided in the "Intent to Test" notification form described below, the permittee shall provide a description of the emissions unit operational conditions they will meet during the emissions testing and describe why they believe "worst case" operating conditions will be met. Prior to conducting the test(s), the permittee shall confirm with the appropriate Ohio EPA District Office or local air agency that the proposed operating conditions constitute "worst case". Failure to test under the approved conditions may result in Ohio EPA 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 Ohio EPA District Office's 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 Limitations:

SO₂ emissions shall not exceed 34.8 pounds per hour when burning oil.

SO₂ emissions shall not exceed 0.06 pound per hour when burning gas.

Applicable Compliance Method:

Compliance with the SO₂ emission limitations was demonstrated through emission testing performed on June 30, 2011 while burning natural gas and June 29, 2011 while burning on-spec used oil.

If required, compliance with the SO₂ emission limitations shall be determined through testing performed in accordance with 40 CFR Part 60, Appendix A, Methods 1-4 and 6.

c. Emission Limitation:

SO₂ emissions shall not exceed 0.66 pound per hour when burning no. 2 fuel oil and/or used oil.

Applicable Compliance Method:

The SO₂ emission limitation was established based upon a 2009, BAT asphalt plant template emission factor for no. 2 fuel oil and/or used oil.

If required, compliance with the SO₂ emission limitations shall be determined through testing performed in accordance with 40 CFR Part 60, Appendix A, Methods 1-4 and 6.

d. Emission Limitation:

Stack PE from this emissions unit shall not exceed 11.4 tons per year (TPY), based upon a rolling, 12-month summation of the monthly emissions.

Fugitive PE from this emissions unit shall not exceed 5.2 tons per year (TPY), based upon a rolling, 12-month summation of the monthly emissions.

Applicable Compliance Method:

Compliance with the tons per rolling, 12-month period limitation shall be determined by a sum of the following calculations:

- i. For the emissions from the baghouse stack, multiply the observed stack emission rate from the most recent emission test, in pounds of PE per hr, by the actual rolling, 12 month summation of operating hours of the burner blower per rolling, 12-month period, (as derived from the records required by d)(3) above) and dividing by 2,000.
- ii. For the emissions from raw material loaded in the weigh hopper/cold feed bins, 1.58 tons of PE per rolling, 12-month period derived from 2,000 hours of operation per rolling, 12-month period multiplied by 350 tons of asphalt produced per hour multiplied by 0.94 (94% of asphalt produced is total raw aggregate material including aggregate and sand) multiplied by the emission factor of 0.0048 lb. of PM/ton raw materials divided by 2,000. (AP-42 Table 11.12-2 (06/2006)).
- iii. For the emissions from aggregate transfer, 1.36 tons of PE per rolling, 12-month period derived from 2,000 hours of operation per rolling, 12-month period multiplied by 350 tons of asphalt produced per hour multiplied by 0.94 (94% of asphalt produced is total raw aggregate material including aggregate and sand) multiplied by 0.60 (60% of total raw aggregate material used is aggregate) multiplied by the emission factor of 0.0069 lb.

of PM/ton of aggregate throughput divided by 2,000. (AP-42 Table 11.12-2 (06/2006)).

- iv. For the emissions from sand transfer, 0.28 ton of PE per rolling, 12-month period derived from 2,000 hours of operation per rolling, 12-month period multiplied by 350 tons of asphalt produced per hour multiplied by 0.94 (94% of asphalt produced is total raw aggregate material including aggregate and sand) multiplied by 0.40 (40% of total raw aggregate material used is sand) multiplied by the emission factor of 0.0021 lb. of PM/ton of sand throughput divided by 2,000. (AP-42 Table 11.12-2 (06/2006)).
- v. For the emissions from silo filling, 0.21 ton of PE per rolling, 12-month period derived from 2,000 hours of operation per rolling, 12-month period multiplied by 350 tons of asphalt produced per hour multiplied by 0.000586 lb. of PM/ton of asphalt produced for silo filling divided by 2,000. (AP-42 Table 11.1-14 (03/2004)).
- vi. For the emissions from asphalt load out, 0.18 ton of PE per rolling, 12-month period derived from 2,000 hours of operation per rolling, 12-month period multiplied by 350 tons of asphalt produced per hour multiplied by 0.000522 lb. of PM/ton of asphalt produced for load-out divided by 2,000. (AP-42 Table 11.1-14 (03/2004)).
- vii. For the emissions from aggregate screening, 0.72 ton of PE per rolling, 12-month period derived from 2,000 hours of operation per rolling, 12-month period multiplied by 350 tons of asphalt produced per hour multiplied by 0.94 (94% of asphalt produced is total raw aggregate material including aggregate and sand) multiplied by the emission factor of 0.0022 lb. of PM/ton of aggregate throughput divided by 2,000. (AP-42 Table 11.19.2-2 (08/2004)).
- viii. For the emissions from RAP screening, 0.36 ton of PE per rolling, 12-month period derived from 2,000 hours of operation per rolling, 12-month period multiplied by 350 tons of asphalt produced per hour multiplied by 0.94 (94% of asphalt produced is total raw aggregate material including aggregate and sand) multiplied by 0.50 (50% of total raw aggregate material used is RAP) multiplied by the emission factor of 0.0022 lb. of PM/ton of RAP throughput divided by 2,000. (AP-42 Table 11.19.2-2 (08/2004)).
- ix. For the emissions from conveyor transfer points, 0.55 ton of PE per rolling, 12-month period derived from 2,000 hours of operation per rolling, 12-month period multiplied by 350 tons of asphalt produced per hour multiplied by 0.94 (94% of asphalt produced is total raw aggregate material including aggregate and sand) multiplied by 12 transfer points multiplied by 0.00014 lb. of PM/ton of raw materials used divided by 2,000. (AP-42 Table 11.19.2-2 (08/2004)).

e. Emission Limitation:

Stack VOC emissions from this emissions unit shall not exceed 21.7 tons per year (TPY), based upon a rolling, 12-month summation of the monthly emissions.

Fugitive VOC emissions from this emissions unit shall not exceed 5.6 tons per year (TPY), based upon a rolling, 12-month summation of the monthly emissions.

Applicable Compliance Method:

Compliance with the tons per rolling 12-month period limitation shall be determined by a sum of the following calculations:

- i. For the VOC emissions from the stack, multiply the observed stack emission rate from the most recent emission test, in pounds of VOC per hr, by the actual rolling 12 month summation of operating hours of the burner blower per rolling 12-month period, (as derived from the records required by d)(3) above) and dividing by 2,000.
- ii. For the emissions from asphalt load out, 1.37 tons per rolling, 12-month period derived from 2,000 hours of operation per rolling, 12-month period multiplied by 350 tons of asphalt produced per hour multiplied by the emission factor of 0.0039 lb. of VOC/ton asphalt produced divided by 2,000. (AP-42, Table 11.1-14 and 11.1-16 (03/2004)).
- iii. For the emissions from asphalt silo filling, 4.27 tons per rolling, 12-month period derived from 2,000 hours of operation per rolling, 12-month period multiplied by 350 tons of asphalt produced per hour multiplied by the emission factor of 0.0122 lb. of VOC/ton asphalt produced divided by 2,000. (AP-42, Table 11.1-14 and 11.1-16 (03/2004)).

f. Emission Limitation:

Stack CO emissions from this emissions unit shall not exceed 88.2 tons per year (TPY), based upon a rolling, 12-month summation of the monthly emissions.

Fugitive CO emissions from this emissions unit shall not exceed 0.9 ton per year (TPY), based upon a rolling, 12-month summation of the monthly emissions.

Applicable Compliance Method:

Compliance with the tons per rolling 12-month period limitation shall be determined by a sum of the following calculations:

- i. For the CO emissions from the stack, multiply the observed stack emission rate from the most recent emission test, in pounds of CO per hr, by the actual rolling 12 month summation of the operating hours of the burner blower per rolling 12-month period, (as derived from the records required by d)(3) above) and dividing by 2,000.

- ii. For the emissions from asphalt load out, 0.47 ton per rolling, 12-month period derived from 2,000 hours of operation per rolling, 12-month period multiplied by 350 tons of asphalt produced per hour multiplied by 0.00135 lb. of CO/ton asphalt produced divided by 2,000. (AP-42, Table 11.1-14 (03/2004)).
 - iii. For the emissions from asphalt silo filling, 0.41 ton per rolling 12-month period derived from 2,000 hours of operation per rolling, 12-month period multiplied by 350 tons of asphalt produced per hour multiplied by the emission factor of 0.00118 lb. of CO/ton asphalt produced divided by 2,000. (AP-42, Table 11.1-14 (03/2004)).
- g. Emission Limitation:
- SO₂ emissions from the stack shall not exceed 34.8 tons per rolling, 12-month period.
- Applicable Compliance Method:
- Compliance with the tons per rolling, 12-month period emission limitation shall be determined by using the equation found in b)(2)a.viii.
- h. Emission Limitation:
- NO_x emissions from the stack shall not exceed 15.5 tons per rolling, 12-month period.
- Applicable Compliance Method:
- Compliance with the tons per rolling, 12-month period emission limitation shall be determined by multiplying the observed emission rate from the most recent emission testing in pounds of NO_x per hour for each fuel type, by the actual summation of the operating hours of the burner blower per rolling, 12-month period by fuel type, (as derived from the records required by d)(3) above) and dividing by 2,000.
- i. Emission Limitation:
- Visible particulate emissions from any stack shall not exceed 10 percent opacity, as a 6-minute average.
- Applicable Compliance Method:
- If required, compliance shall be determined through visible emission observations performed in accordance with U.S. EPA Method 9.
- j. Emission Limitation:
- Visible particulate emissions of fugitive dust shall not exceed 20 percent opacity, as a 3-minute average.

Applicable Compliance Method:

If required, compliance shall be determined through visible emission observations performed in accordance with U.S. EPA Method 9.

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

The applicable test methods that should be used are as follows:

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

Mercury: SW-846, Method 7471A;

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

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

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

- (3) Compliance with the annual operating hours limitation in b)(2)b. and the RAP and/or asphalt shingles limitation in c)(1) shall be demonstrated by the record keeping in d)(3).
- (4) Compliance with the used oil specifications in b)(2)d. shall be demonstrated by the record keeping in d)(6).
- (5) Compliance with the fuel limitation in c)(2) shall be demonstrated by the record keeping required in d)(4) through d)(6).
- (6) Sulfur Content Limitation:

All on-spec used oil burned in this emissions unit shall have a sulfur content equal to or less than 0.5% by weight.

Applicable Compliance Method:

Compliance shall be determined by the record keeping required pursuant to d)(6).

- (7) Burner Evaluation/Tuning

a. Introduction

The permittee is required to conduct periodic evaluation/tuning of the asphalt plant burner as set forth below. The purpose of this evaluation/tuning is to ensure

that the burner is adjusted and maintained in order to make the burner as fuel efficient as possible.

b. Qualifications for Burner Evaluation/Tuning

Technicians who conduct the burner evaluation/tuning must be qualified to perform the expected burner evaluation/tuning tasks. In order to be qualified, the technician must have passed manufacturer's training concerning burner evaluation/tuning, or must have been trained by someone who has completed the manufacturer's training concerning burner evaluation/tuning. Burner evaluation/tuning technicians can be either permittee employees or outside parties.

c. Portable Monitor Requirements

Portable monitors used for burner evaluation/tuning shall be properly operated and maintained to monitor the concentration of NO_x, O₂, and CO in the stack exhaust gases from this emissions unit. The monitor(s) shall be capable of measuring the expected concentrations of the measured gases. The monitoring equipment shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The owner or operator of the portable monitor shall maintain records of each portable monitoring device's calibration.

d. Burner Evaluation/Tuning Procedure

An alternative form may be used as long as it contains the same data elements as the Burner Evaluation/Tuning Reporting Form for Asphalt Concrete Plants form.

The burner shall be evaluated and, if necessary, tuned based on the frequency described in f)(7)e.

The general procedure for evaluating and, if necessary, tuning the burner involves the following steps:

- i. Review the plant operations to ensure the plant is operating normally based on weather conditions and production.
- 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 NO_x, O₂, and CO. These measurements shall be taken at a location representative of stack emissions. Record the values in the "Pre-Tuning" results column on the Burner Tuning Reporting Form for Asphalt Concrete Plants form (as found in g)). An alternative form may be used as long as it contains the same data elements as the Burner Evaluation/Tuning Reporting Form for Asphalt Concrete Plants form.

- iv. Make any necessary adjustments and repairs to the burner in order to make the burner as fuel efficient as possible.
- v. If adjustments or repairs are made to the burner, then the technician shall re-measure the stack exhaust gas values for NO_x, O₂, and CO. This procedure shall be repeated until the technician is satisfied that the burner has been appropriately tuned. Once he/she is satisfied, then the technician shall record the post tune NO_x, O₂, and CO values in the "Post Tuning" results column on the Burner Tuning Reporting Form for Asphalt Concrete Plants (or equivalent) form.

Note that the Ohio EPA reserves the right to require permittees to conduct additional emissions tests to verify compliance. Operators who choose not to keep their burners in tune are more likely to be required by Ohio EPA to conduct additional emissions tests to verify compliance. Therefore, it is recommended that permittees make necessary adjustments and repairs to burners as soon as possible and verify that the burner is operating as designed.

- vi. Submit a copy of all Burner Evaluation/Tuning Reporting Form(s) 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. Note: These forms are required to be submitted even if the burner is not actually adjusted.

e. Burner Tuning Frequency

The permittee shall conduct the burner evaluation/tuning procedure within 30 production days after commencement of the production season in the State of Ohio. The permittee shall conduct another burner evaluation/tuning procedure within 15 production days before or after June 1st of each year and within 15 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 evaluation/tuning is not required if the production season ends prior to the associated evaluation/tuning due date. If the initial season evaluation/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 evaluation/tuning procedure required above, the permittee shall conduct the burner evaluation/tuning procedure within 20 production days from the date the facility switches to a fuel that is different than the fuel burned during the most recent burner evaluation/tuning procedure.

- f. In addition to the burner evaluation/tuning procedure required above, the permittee shall conduct the burner evaluation/tuning procedure within 20 production days from the date that a scheduled/planned fuel switch occurs.



Final Permit-to-Install and Operate
Barrett Paving - Middletown Asphalt
Permit Number: P0118215
Facility ID: 1409010131
Effective Date: 10/28/2016

- g) Miscellaneous Requirements
 - (1) Burner Tuning Form (see next page)

BURNER EVALUATION/TUNING REPORTING FORM FOR ASPHALT CONCRETE PLANTS

Facility ID:	Evaluation/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 evaluation/tuning:	Name of company performing emission monitoring:
Type of plant (ie: batch, drum mix, etc.):	Calibration date for analyzers:

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

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

Evaluation/Tuning Results:

Parameter	Results	
	Pre Tuning	Post Tuning ²
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) ¹		
NOx concentrations (ppm) ²		
Oxygen concentrations (per cent) ²		

Asphalt Production (tons/hr)		
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¹ Specify whether on a dry or wet basis.

² If the burner did not require adjusting, please record N/A in the post tuning column.

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

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

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