



State of Ohio Environmental Protection Agency

STREET ADDRESS:

Lazarus Government Center  
50 W. Town St., Suite 700  
Columbus, Ohio 43215

TELE: (614) 644-3020 FAX: (614) 644-3184  
www.epa.state.oh.us

MAILING ADDRESS:

P.O. Box 1049  
Columbus, OH 43216-1049

10/27/2008

JAMES KROMER  
ERIE MATERIALS INC  
PO BOX 2308  
SANDUSKY, OH 44870

RE: FINAL AIR POLLUTION PERMIT-TO-INSTALL AND OPERATE  
Facility ID: 0322020211  
Permit Number: 03-17399  
Permit Type: Initial Installation  
County: Erie

Certified Mail

No	TOXIC REVIEW
No	PSD
No	SYNTHETIC MINOR
No	CEMS
No	MACT
No	NSPS
No	NESHAPS
No	NETTING
No	MAJOR NON-ATTAINMENT
No	MODELING SUBMITTED

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.

Ohio EPA maintains a document entitled "Frequently Asked Questions about the PTIO". The document can be downloaded from the DAPC Web page, [www.epa.state.oh.us/dapc](http://www.epa.state.oh.us/dapc), from the "Permits" link. This document contains additional information related to your permit, such as what activities are covered under the PTIO, who has enforcement authority over the permit and Ohio EPA's authorization to inspect your facility and records. Please contact the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469 if you need assistance.

The issuance of this PTIO is a final action of the Director and may be appealed to the Environmental Review Appeals Commission ("ERAC") under Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and describe the action complained of and the grounds for the appeal. The appeal must be filed with the ERAC within thirty (30) days after notice of the Director's action. A filing fee of \$70.00 must be submitted to the ERAC with the appeal, although the ERAC, has discretion to reduce the amount of the filing fee if you can demonstrate (by affidavit) that payment of the full amount of the fee would cause extreme hardship. If you file an appeal of this action, you must notify Ohio EPA of the filing of the appeal (by providing a copy to the Director) within three (3) days of filing your appeal with the ERAC. Ohio EPA requests that a copy of the appeal also be provided to the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the ERAC at the following address:

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

If you have any questions regarding this permit, please contact the Ohio EPA DAPC, Northwest District Office. This permit has been posted to the Division of Air Pollution Control (DAPC) Web page [www.epa.state.oh.us/dapc](http://www.epa.state.oh.us/dapc).

Sincerely,

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

Cc: Ohio EPA-NWDO

Ted Strickland, Governor  
Lee Fisher, Lieutenant Governor  
Chris Korleski, Director





**State of Ohio Environmental Protection Agency  
Division of Air Pollution Control**

**FINAL**

**Air Pollution Permit-to-Install and Operate  
for  
ERIE MATERIALS INC**

Facility ID: 0322020211  
Permit Number: 03-17399  
Permit Type: Initial Installation  
Issued: 10/27/2008  
Effective: 10/27/2008  
Expiration: 10/27/2018





State of Ohio Environmental Protection Agency  
Division of Air Pollution Control

**Air Pollution Permit-to-Install and Operate**  
for  
**ERIE MATERIALS INC**

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State of Ohio Environmental Protection Agency  
Division of Air Pollution Control

**Final Permit-to-Install and Operate**  
**Permit Number:** 03-17399  
**Facility ID:** 0322020211  
**Effective Date:** 10/27/2008

## Authorization

Facility ID: 0322020211  
Application Number(s): A0003893  
Permit Number: 03-17399  
Permit Description: Rotary Thermal Recycling System with Thermal Oxidizer (110 tons per hour).  
Permit Type: Initial Installation  
Permit Fee: \$1,250.00  
Issue Date: 10/27/2008  
Effective Date: 10/27/2008  
Expiration Date: 10/27/2018  
Permit Evaluation Report (PER) Annual Date: Jan 1 - Dec 31, Due Feb 15  
This document constitutes issuance to:

ERIE MATERIALS INC  
4507 TIFFIN AVE  
SANDUSKY, OH 44870

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

Chris Korleski  
Director



State of Ohio Environmental Protection Agency  
Division of Air Pollution Control

**Final Permit-to-Install and Operate**

**Permit Number:** 03-17399

**Facility ID:** 0322020211

**Effective Date:** 10/27/2008

## Authorization (continued)

Permit Number: 03-17399

Permit Description: Rotary Thermal Recycling System with Thermal Oxidizer (110 tons per hour).

Permits for the following emissions unit(s) or groups of emissions units are in this document as indicated below:

<b>Emissions Unit ID:</b>	<b>P901</b>
Company Equipment ID:	RTRS with RTO
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable



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**Final Permit-to-Install and Operate**

**Permit Number:** 03-17399

**Facility ID:** 0322020211

**Effective Date:** 10/27/2008

## **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 will no longer be applicable after issuance of the Title V permit: Section B, Term 1.b) and Section C, for each emissions unit, Term a)(2).

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

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

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



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

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

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

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

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

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

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

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

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

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

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

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



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Division of Air Pollution Control

**Final Permit-to-Install and Operate**

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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.



State of Ohio Environmental Protection Agency  
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**Final Permit-to-Install and Operate**

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



State of Ohio Environmental Protection Agency  
Division of Air Pollution Control

**Final Permit-to-Install and Operate**

**Permit Number:** 03-17399

**Facility ID:** 0322020211

**Effective Date:** 10/27/2008

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.



State of Ohio Environmental Protection Agency  
Division of Air Pollution Control

**Final Permit-to-Install and Operate**

**Permit Number:** 03-17399

**Facility ID:** 0322020211

**Effective Date:** 10/27/2008

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



**1. P901, Rotary Thermal Recycling System with Thermal Oxidizer**

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

Rotary Thermal Recycling System with Thermal Oxidizer. (110 tons per hour)

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.

(1) The following applicable emission limitations contained in b)(1)a. are state only enforceable: and have been established for purposes of avoiding state modeling requirements:

(2) 23.85 tons nitrogen oxide (NOx) per year when burning on-spec used oil, and fuel oil (This emission limitation has been established for purposes of avoiding state modeling requirements).

(3) 11.27 tons NOx per year when burning natural gas.

(4) The emission limitations above are based on the state only enforceable operational restriction contained in b)(3)f.

(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.

(1) None.

b) **Applicable Emissions Limitations and/or Control Requirements**

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)(a)	Stack Emissions:  Nitrogen oxide (NOx) emissions shall not exceed 0.055 pound per ton of asphalt produced when burning on-spec used oil, and/or fuel oil.  NOx emissions shall not exceed 0.026 pound per ton of asphalt produced when burning natural gas.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	OAC rule 3745-31-05(A)(3)(a) continued	23.85 tons NOx per year when burning natural gas, on-spec used oil and/or fuel oil.
b.	OAC rule 3745-31-05(A)(3)(a)(ii)	See b)(2)b. and b)(2)c.
c.	40 CFR Part 60, Subpart I	Emissions from the thermal hot fluid heater/thermal oxidizer stack shall not exhibit 20% opacity, or greater. Particulate emissions (PE) shall not exceed 0.04 gr/dscf
d.	OAC rule 3745-17-07(A)	See b)(2)d.
e.	OAC rule 3745-17-11(B)	See b)(2)d.
f.	OAC rule 3745-17-08(A)	See b)(2)e.
g.	OAC rule 3745-17-07(B)	See b)(2)f.
h.	OAC rule 3745-18-06(E)	See b)(2)i.

(2) Additional Terms and Conditions

- a. Best Available Technology (BAT) requirements for this emissions unit has been determined to be compliance with NOx limitations contained in b)(1)a. and the production restriction specified in b)(3)f. The 23.85 tons NOx per year emission limitation is based on a annual restriction of 867,240 tons of asphalt produced. The annual emission limitation and production restriction were established for purposes of avoiding state modeling requirements.  
  
BAT requirements include compliance with the on spec oil specifications contained in b)(2)g.
- b. PTIO 03-17399 for this air contaminant source takes into account the following voluntary restrictions as proposed by the permittee for the purpose of avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3):
  - i. use of a thermal oxidation control system (thermal oxidizer/thermal hot fluid heater) achieving a 100% capture efficiency and the following:
    - 1. a 95% destruction efficiency for organic compounds (OC);
    - 2. a 95% reduction in carbon monoxide (CO) emissions; and
    - 3. a 95% destruction efficiency for sulfur dioxide (SO2) emissions.
  - ii. use of only on-spec used oil and fuel oils #2, #4, and #6 meeting the specifications outlined in b)(2)d. and b)(2)e.
- c. The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3)(a) do not apply to particulate emissions (PE) and the emissions of particulate matter 10 microns or less in size (PM10) from this air contaminant



source since the uncontrolled potential to emit for PE and PM10 is each less than ten tons per year.

- d. The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to 40 CFR Part 60, Subpart I.
- e. This emissions unit is not located within an "Appendix A" area as identified in OAC rule 3745-17-08. Therefore, pursuant to OAC rule 3745-17-08(A), this emissions unit is exempt from the requirements of OAC rule 3745-17-08(B).
- f. This emissions unit is exempt from the visible PE limitations specified in OAC rule 3745-17-07(B) pursuant to OAC rule 3745-17-07(B)(11)(e).
- g. All used oil burned in this emissions unit shall meet the following specifications:

Contaminant/Property Allowable Specifications

arsenic	5 ppm, maximum
cadmium	2 ppm, maximum
chromium	10 ppm, maximum
lead	100 ppm, maximum
PCB's	2 ppm, maximum*
total halogens	4000 ppm maximum**
mercury	1 ppm, maximum
flash point	100°F, minimum
heat content	135,000 Btu/gallon, minimum
sulfur content	0.5%, by weight, maximum

\*If the permittee is burning used oil with any quantifiable level (2 ppm or greater) of PCB's, then the permittee is subject to the notification requirements of 40 CFR 279.62.

\*\*Used oil containing more than 1000 ppm total halogens is presumed to be a hazardous waste under the rebuttable presumption provided under 40 CFR Part 266.40(c) and OAC rule 3745-279. Therefore, the permittee may receive and burn used oil exceeding 1000 ppm of total halogens (but less than 4000 ppm, maximum) only if the supplier ["marketer" in 40 Part CFR 266.43(a)] has demonstrated to the Ohio EPA's Division of Hazardous Waste Management that the used oil does not contain any hazardous waste.

- h. In addition to the on-spec used oil specified above in b)(2)g., only the following oils shall be burned in this emissions unit:



- i. Virgin #2 fuel oil containing no more than 0.5% by weight sulfur;
- ii. Virgin #4 fuel oil containing no more than 0.8% by weight sulfur; and
- iii. Virgin #6 fuel oil containing no more than 1% by weight sulfur.

The permittee shall operate and maintain the fuel burners 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 NOx.

- i. The “oven burners” for the rotary thermal processing portion of this emission unit result in a “direct fired” application and as such the emissions unit is applicable to an emissions limitation of 699.61 pounds sulfur dioxide (SO2) per hour as established by OAC rule 3745-18-06(E)(2) when utilizing on spec used oil or fuel oils. It should be noted that SO2 emissions are also generated by the use of oil as a fuel in the burners for the heating coils in the thermal oxidizer/thermal hot fluid heater. The 699.61 pounds per hour limitation applies to the SO2 emissions from all the burners (oven burners and heating coils).

The uncontrolled potential to emit from this emissions unit is less than the emission limitation established pursuant to OAC rule 3745-18-06(E)(2). The uncontrolled potential to emit is 6.38 pounds SO2 per hour and was determined by multiplying an emission factor of 0.058 pound SO2 per ton of asphalt produced [U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 11.1, Table 11.1-7 (3/04)] by a maximum production rate of 110 tons of asphalt per hour.

c) Operational Restrictions

- (1) The thermal oxidizer/thermal hot fluid heater serving this emissions unit shall be employed all times the emissions unit is in operation.
- (1) No fuels, other than natural gas and the oils specified above, shall be burned in this emissions unit. In order to use an approved fuel on an ongoing basis, the permittee shall complete the emissions testing for that fuel as indicated in b)(2)6.
- (2) Used oil that does not meet the specifications listed in b)(2)g. is off-specification used oil. The permittee shall not receive or burn any off-specification used oil. The burning of off-specification used oil is subject to OAC rule 3745-279-60 through 67.
- (3) The permittee shall operate and maintain all fuel burners in accordance with the manufacturer’s recommendations to ensure efficient combustion of the fuel(s) and to ensure compliance with the applicable emission limitation for NOx.
- (4) The permittee may use only reclaimed asphalt pavement (RAP) in the raw material feed mix in emissions unit P901.
- (5) The permittee shall not exceed an annual throughput of 867,240 tons of asphalt production.



d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall document all times the thermal oxidizer/thermal hot fluid heater serving this emissions unit was not employed when the emissions unit was in operation.
- (2) The permittee shall properly install, operate, and maintain equipment to continuously monitor and record the combustion temperature within the thermal oxidizer/thermal hot fluid heater during operation of this emissions unit. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer=s recommendations, instructions, and operating manual(s). The acceptable temperature setting shall be based upon the manufacturer=s specifications until such time as any required emission testing is conducted and an appropriate minimum temperature value is established to demonstrate compliance. These records shall be maintained at the facility for a period of no less than 3 years.

Whenever the monitored combustion temperature within the thermal oxidizer/thermal hot fluid heater deviates from minimum temperature value specified below, the permittee shall maintain records of the following information for each investigation

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

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment in conformance with the acceptable temperature value 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. a description of the corrective action;
- b. the date corrective action was completed;
- c. the date and time the deviation ended;
- d. the total period of time (in minutes) during which there was a deviation;
- e. the temperature readings immediately after the corrective action was implemented; and
- f. the name(s) of the personnel who performed the work.



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

The minimum temperature requirement is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the permitted temperature value based upon information obtained during future emission tests that demonstrate compliance with the allowable emission rate(s) for the controlled pollutant(s). In addition, approved revisions to the temperature value 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.

- (3) The permittee shall receive a chemical analysis with each shipment of used oil from the supplier. The analysis shall identify the name and address of the supplier, the supplier's USEPA identification number, and the following information:
  - a. The date of the shipment or delivery.
  - b. The quantity of used oil received.
  - c. The Btu value of the used oil, in Btu/gallon.
  - d. The flash point of the used oil, in Btu/gallon.
  - e. The arsenic content, in ppm.
  - f. The cadmium content, in ppm.
  - g. The chromium content, in ppm.
  - h. The lead content, in ppm.
  - i. The PCB content, in ppm.
  - j. The total halogen content, in ppm.
  - k. The mercury content, in ppm.

Each analysis shall be kept in a readily accessible location for at least 5 years and shall be made available to the Director (the appropriate Ohio EPA District Office or local air agency) upon verbal or written request. The Director or any authorized representative of the Director may require or may conduct periodic, detailed chemical analysis through an independent laboratory or any used oil shipment received by this facility, of any used oil stored at this facility, or of any used oil sampled at the dryer.

- (4) The permittee shall maintain monthly records of the amount of asphalt production for this emissions unit (in tons per month and total tons, to date for the calendar year).
- (5) For each day during which the permittee processes a raw material other than RAP, the permittee shall maintain a record of the type and quantity of raw material processed in this emissions unit.



- (6) For each shipment of distillate 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) While performing each burner tuning, the permittee shall record the results of the burner tuning using the *Burner Tuning Reporting Form Asphalt Concrete Plants form* [as found in b)(7)b.]. An alternative form may be used upon approval of the appropriate Ohio EPA District Office of local air agency.

e) Reporting Requirements

- (1) 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.

In addition to standard requirements for the PER, the permittee shall also identify in the annual PER the following information concerning the operations of the thermal oxidizer/thermal hot fluid heater during the 12-month reporting period for this emissions unit:

- a. each period of time (start time and date, and end time and date) when the combustion temperature within the thermal oxidizer was outside of the range specified by the manufacturer and/or outside of the acceptable range following any required compliance demonstration;
  - b. each 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 thermal oxidizer;
  - c. an identification of each incident of deviation described in Ai@ or "ii" (above) where a prompt investigation was not conducted;
  - d. an identification of each incident of deviation described in Ai@ or "ii" where prompt corrective action, that would bring the emissions unit(s) into compliance and/or the temperature within the thermal oxidizer into compliance with the acceptable range, was determined to be necessary and was not taken; and
  - e. an identification of each incident of deviation described in Ai@ or "ii" where proper records were not maintained for the investigation and/or the corrective action(s).
- (2) The permittee shall submit a copy of the *Burner Tuning Reporting Form for Asphalt Concrete Plants form* to the appropriate Ohio EPA district office or local air agency to summarize the results of each burner tuning procedure. These reports shall be submitted to the Ohio EPA district office or local air agency by January 31 of each year and shall cover the previous calendar year.



f) Testing Requirements

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

As indicated in term and condition b)(3)b., in order to be approved for the use of a fuel on an ongoing basis, the permittee shall complete emission testing for that fuel as indicated below:

- a. The emission testing shall be conducted within 60 days after achieving the maximum production rate, but no later than 120 days after initial startup of the emissions unit.
- b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for NOx and PE.

The emission testing shall also be conducted to present mass emission rates for OC, CO, and SO2 along with capture and control efficiencies for OC and SO2.

- c. The following test method(s) shall be employed to meet the requirements of “vi.” above:

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

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

For SO2, Methods 1-4 and 6 or 6C of 40 CFR Part 60, Appendix A

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

For OC, 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.

- d. The test(s) shall be conducted while this emissions unit is operating at its maximum capacity for PE, OC, CO, NOx and SO2, unless otherwise specified or approved by the Ohio EPA District Office or local air agency.
- e. the capture efficiency shall be determined using Methods 204 through 204F, as specified in 40 CFR Part 51, Appendix M, or the permittee may request to use an alternative method or procedure for the determination of capture efficiency in accordance with the USEPA’s “Guidelines for Determining Capture Efficiency,” dated January 9, 1995. (The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.) The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in the approved alternative test protocol. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present



and their total concentration, and on a consideration of the potential presence of interfering gases.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA 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 or local air agency's refusal to accept the results of the emission test(s).

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

- (2) Future testing requirements shall be conducted in accordance with applicable rules, policies, etc. (i.e. Engineering Guide #16, OAC rule 3745-15-04, etc.). Testing time frame(s) specified may be amended or waived for cause upon prior request of, and written approval of, the Ohio EPA Northwest District Office.
- (3) Compliance with the emission limitations in section b(1) of the terms and conditions of this permit shall be determined in accordance with the following methods:

a. Emission Limitation:

23.85 tons NOx per year when burning natural gas, on-spec used oil and/or fuel oil.

Applicable Compliance Method:

The annual limitation was established by multiplying the 0.055 pound per ton of asphalt produced limitation by a production limitation of 867,240 tons per year and dividing by 2000 pounds per ton. Therefore, provided compliance is shown with the pound per ton of asphalt produced emission limitation and the annual production limitation, compliance with the annual emission limitation shall be assumed.

b. Emission Limitation:

Emissions from the thermal hot fluid heater/thermal oxidizer stack shall not exhibit 20% opacity, or greater.



Applicable Compliance Method:

Compliance shall be determined using Method 9 as set forth in 40 CFR Part 60 Appendix A.

c. Emission Limitation:

NOx emissions (from the thermal oxidizer/thermal hot fluid heater) shall not exceed 0.055 pound per ton of asphalt produced when burning on-spec used oil, and/or fuel oil.

Applicable Compliance Method:

Compliance shall be based upon an emission factor of 0.055 pound NOx per ton of asphalt produced. This emission factor is specified in the U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 11.1, Table 11.1-7 (3/04).

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in Methods 1-4 and 7 or 7E of 40 CFR Part 60, Appendix A.

d. Emission Limitation:

NOx emissions (from the thermal oxidizer/thermal hot fluid heater) shall not exceed 0.026 pound per ton of asphalt produced when burning natural gas.

Applicable Compliance Method:

Compliance shall be based upon an emission factor of 0.026 pound NOx per ton of asphalt produced. This emission factor is specified in the U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 11.1, Table 11.1-7 (3/04).

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in Methods 1-4 and 7 or 7E of 40 CFR Part 60, Appendix A.

(4) Burner Tuning

a. Introduction

The permittee is required to conduct periodic tuning of the burner associated with this emissions unit. The purpose of this tuning is to ensure that each burner is adjusted properly so that air pollution emissions remain in compliance with allowable emission rates and are also minimized.

b. Qualifications for Burner Tuning

Technicians who conduct the burner tuning must be qualified to perform the expected tasks. The permittee is required to provide training to the technicians who perform the burner tuning procedure. Technicians who are qualified shall, at a minimum, have passed manufacturer's training concerning burner tuning, or



have been trained by someone who has completed the manufacturer's training concerning burner tuning.

c. Portable Monitor Requirements

The permittee shall properly operate and maintain portable device(s) to monitor the concentration of NO<sub>x</sub>, O<sub>2</sub> and CO in the stack exhaust gases from this emissions unit. The monitor(s) shall be capable of measuring the expected concentrations of the measured gases. The monitoring equipment shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall maintain records of each portable monitoring device's calibration.

d. Burner Tuning Procedure

The first steps concerning burner tuning involve setting the pollutant baseline levels (concentrations) utilizing the portable monitor. These baselines shall be set during the initial U.S. EPA approved emissions testing that demonstrated the emissions unit was in compliance with all applicable emissions limitations as described in E.1.a. The baselines shall be determined for NO<sub>x</sub> and CO. Sampling should measure the exhaust gas values exiting the baghouse. The duration of each sample shall follow the portable monitor manufacturer's recommendations. Record these values on the *Burner Tuning Reporting Form for Asphalt Concrete Plants* form (as found in F.2) in the "Recent Stack Test Basis Values" column.

Once the pollutant baseline levels are set, the burner shall be next tuned based on the frequency described in E.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 monitor manufacturer's recommended sampling duration, measure the stack exhaust gas values for NO<sub>x</sub> and CO. These measurements shall be taken at the same location as the location where the baseline samples were taken. Record the values in the "Pre Tuning" results column on the *Burner Tuning Reporting Form for Asphalt Concrete Plants* form.
- iv. Compare the measured stack exhaust gas values with the pollutant baseline values. If all of the measured stack exhaust gas values are equal to or less than 115 percent of the pollutant baseline values, then it is not necessary to tune the burner. Go on to section v. below. The permittee shall have the burners tuned within two calendar weeks of any measured stack exhaust values greater than 115 percent of the baseline values. Make any necessary adjustments and repairs. Repeat sections iii. and iv. until the measured stack exhaust gas values are equal to or less than 115 percent of the pollutant baseline values.



- v. Once all of the measured stack exhaust gas values are within the 115 percent of the pollutant baseline values, record the measured stack exhaust gas values in the "Post Tuning" results column on the *Burner Tuning Reporting Form for Asphalt Concrete Plants* form.
- vi. By January 31st of each year, submit a copy of all Burner Tuning Reporting Form for Asphalt Concrete Plants forms produced during the past calendar year to the Ohio EPA District Office or local air agency responsible for the permitting of the facility.

e. Burner Tuning Frequency

The permittee shall conduct the burner tuning procedure within 20 production days after commencement of the production season in the State of Ohio. The permittee shall conduct another burner tuning procedure within 10 production days before or after June 1st of each year and within 10 production days before or after September 1st of each year. For purposes of this permit, the production season is defined as the time period between the date the first ton of asphalt is produced and the date that the last ton of asphalt is produced during the same calendar year. A burner tuning is not required if the production season ends prior to the associated tuning due date.

g) Miscellaneous Requirements

- (1) Modeling to demonstrate compliance with, the A 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 PTIO modification.
- (2) The following source is subject to the applicable provision of the New Source Performance Standards (NSPS) as promulgated by the United States Environmental Protection Agency, 40 CFR part 60.

Source Number	Source Description	NSPS Regulation (Subpart)
P901	110 ton/hr asphalt plant	Subpart I

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

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

- a. Construction date (no later than 30 days after such date);
- b. Actual start-up date (within 15 days after such date); and
- c. Date of performance testing (If required, at least 30 days prior to testing).



Reports are to be sent to the Ohio EPA District Office or local air agency responsible for the permitting of the facility.

(3) Burner Tuning Form (see below):

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)

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

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Tuning Results:

Parameter	Recent Stack Test Pollutant Baseline Levels <sup>1</sup>	Results	
		Pre Tuning	Post Tuning <sup>3</sup>
Fuel flow to the burner (gallon/hr) (for fuel oil and on-spec used oil)			
Fuel pressure (psi)			



State of Ohio Environmental Protection Agency  
 Division of Air Pollution Control

**Final Permit-to-Install and Operate**

**Permit Number:** 03-17399

**Facility ID:** 0322020211

**Effective Date:** 10/27/2008

For burners that require compressed air for proper operation, pressure at the burner (psi)			
Carbon Monoxide (CO) concentrations (ppm) <sup>2</sup>			
NOx concentrations (ppm) <sup>2</sup>			
Oxygen concentrations (per cent) <sup>2</sup>			
Asphalt Production (tons/hr)			

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

<sup>2</sup> Specify whether on a dry or wet basis.

<sup>3</sup> If the burner did not require adjusting, please record N/A in the post tuning column.

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

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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: