



12/31/2014

Certified Mail

Dan Crago
Greater Cincinnati Asphalt Terminal 2
11641 MOSTELLER RD
CINCINNATI, OH 45241

No	TOXIC REVIEW
No	SYNTHETIC MINOR TO AVOID MAJOR NSR
No	CEMS
No	MACT/GACT
No	NSPS
No	NESHAPS
No	NETTING
No	MODELING SUBMITTED
No	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: 1431302438
Permit Number: P0118108
Permit Type: Renewal
County: Hamilton

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**

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.

If you have any questions, 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,



Erica R. Engel-Ishida, Manager
Permit Issuance and Data Management Section, DAPC

Cc: SWOAQA



FINAL

**Division of Air Pollution Control
Permit-to-Install and Operate
for
Greater Cincinnati Asphalt Terminal 2**

Facility ID:	1431302438
Permit Number:	P0118108
Permit Type:	Renewal
Issued:	12/31/2014
Effective:	12/31/2014
Expiration:	8/22/2018



Division of Air Pollution Control
Permit-to-Install and Operate
for
Greater Cincinnati Asphalt Terminal 2

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Final Permit-to-Install and Operate
Greater Cincinnati Asphalt Terminal 2
Permit Number: P0118108
Facility ID: 1431302438
Effective Date: 12/31/2014

Authorization

Facility ID: 1431302438
Application Number(s): A0052312
Permit Number: P0118108
Permit Description: PTIO renewal for asphalt loading rack and five fixed roof storage tanks with mist eliminator and carbon filter.
Permit Type: Renewal
Permit Fee: \$0.00
Issue Date: 12/31/2014
Effective Date: 12/31/2014
Expiration Date: 8/22/2018
Permit Evaluation Report (PER) Annual Date: Jan 1 - Dec 31, Due Feb 15

This document constitutes issuance to:

Greater Cincinnati Asphalt Terminal 2
10100 Brower Road
North Bend, OH 45052

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

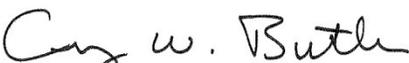
Ohio Environmental Protection Agency (EPA) District Office or local air agency responsible for processing and administering your permit:

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



Authorization (continued)

Permit Number: P0118108

Permit Description: PTIO renewal for asphalt loading rack and five fixed roof storage tanks with mist eliminator and carbon filter.

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

Emissions Unit ID:	J001
Company Equipment ID:	Asphalt Loading Rack
Superseded Permit Number:	P0111164
General Permit Category and Type:	Not Applicable

Group Name: Tanks 1, 2, 3, 4, 7

Emissions Unit ID:	T005
Company Equipment ID:	Tank 1
Superseded Permit Number:	P0111164
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	T006
Company Equipment ID:	Tank 2
Superseded Permit Number:	P0111164
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	T007
Company Equipment ID:	Tank 3
Superseded Permit Number:	P0111164
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	T008
Company Equipment ID:	Tank 4
Superseded Permit Number:	P0111164
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	T009
Company Equipment ID:	Tank 7
Superseded Permit Number:	P0111164
General Permit Category and Type:	Not Applicable



Final Permit-to-Install and Operate
Greater Cincinnati Asphalt Terminal 2
Permit Number: P0118108
Facility ID: 1431302438
Effective Date: 12/31/2014

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



Final Permit-to-Install and Operate
Greater Cincinnati Asphalt Terminal 2
Permit Number: P0118108
Facility ID: 1431302438
Effective Date: 12/31/2014

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
Greater Cincinnati Asphalt Terminal 2
Permit Number: P0118108
Facility ID: 1431302438
Effective Date: 12/31/2014

B. Facility-Wide Terms and Conditions



Final Permit-to-Install and Operate
Greater Cincinnati Asphalt Terminal 2
Permit Number: P0118108
Facility ID: 1431302438
Effective Date: 12/31/2014

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.



Final Permit-to-Install and Operate
Greater Cincinnati Asphalt Terminal 2
Permit Number: P0118108
Facility ID: 1431302438
Effective Date: 12/31/2014

C. Emissions Unit Terms and Conditions



1. J001, Asphalt Loading Rack

Operations, Property and/or Equipment Description:

asphalt loading rack

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. g)(1).

(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)d., c)(1), d)(1)b., d)(2)b., e)(3) , f)(1)b. ,f)(1)c., f)(1)d., f)(1)e. and f)(2).

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	<p>Emissions of particulate matter (PM) and particulate matter 10 microns and less in diameter (PM-10) shall not exceed 2.82 pounds per hour.</p> <p>Emissions of volatile organic compounds (VOC) shall not exceed 10.0 pounds per hour.</p> <p>Emissions of carbon monoxide (CO) shall not exceed 0.13 pound per hour.</p> <p>Emissions of hydrogen sulfide (H₂S) shall not exceed 0.16 pound per hour.</p>



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		<p>The hourly emission limitation(s) outlined are based upon the emissions unit's Potential to Emit (PTE). Therefore, no hourly records are required to demonstrate compliance with these limits.</p> <p>The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A)(1).</p>
b.	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from any stack shall not exceed 20 percent opacity as a six-minute average, except as provided by rule.
c.	OAC rule 3745-17-11(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05 (A)(3).
d.	OAC rule 3745-31-05(D)	<p>Particulate emissions (PM) and particulate emissions 10 microns and less in diameter (PM-10) shall not exceed 6.18 tons per year, based upon a rolling, 12-month summation.</p> <p>Volatile Organic Compound (VOC) emissions shall not exceed 21.91 tons per year, based upon a rolling, 12-month summation.</p> <p>Carbon Monoxide (CO) emissions shall not exceed 0.28 ton per year, based upon a rolling, 12-month summation.</p> <p>Hydrogen Sulfide (H₂S) emissions shall not exceed 0.35 ton per year, based upon a rolling, 12-month summation.</p>

(2) Additional Terms and Conditions

- a. Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by compliance with the visible emission limitation, mass emission limitations and production limitation.



c) Operational Restrictions

- (1) The maximum annual amount of asphalt loaded in this emissions unit shall not exceed 1,023,825 tons per year, based on a rolling, 12-month summation of the asphalt loading rates.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall maintain monthly records of the following information for this emissions unit in order to monitor compliance with the applicable material throughput restriction:
 - a. the asphalt throughput, in tons for each month; and
 - b. the rolling, 12-month summation, in tons of the asphalt throughput.
- (2) The permittee shall maintain monthly records of the following information for this emissions unit in order to demonstrate compliance with the rolling, 12-month summation emission limitations:
 - a. the total emissions, in tons, for VOC, PM, PM10, CO, and H2S for each month; and
 - b. the updated rolling, 12-month summation emissions total, in tons, for VOC, PM, PM10, CO, H2S, the total amount of emissions for the current month plus the total amount of emissions for the previous eleven calendar months).

e) Reporting Requirements

- (1) 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.
- (2) 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.



- (3) 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. exceedance of the rolling, 12-month material throughput limitation in c)(1).
 - ii. exceedance of the rolling, 12-month emissions limitations in b)(1)d.
 - 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).

f) Testing Requirements

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

Visible particulate emissions from any stack shall not exceed 20 percent opacity as a six-minute average, except as specified by rule.

Applicable compliance method:

Compliance with the stack visible particulate emissions limitation shall be determined through visible emissions observations performed in accordance U.S. EPA Method 9.
 - b. Emission Limitations:

Emissions of particulate matter (PM) and particulate matter 10 microns and less (PM-10) shall not exceed 2.82 pound per hour and 6.18 TPY based on a rolling, 12-month summation.



Applicable Compliance Method:

PM and PM-10 emissions limitations were calculated using the following equation:

$$\begin{aligned}\text{lbs PM/PM-10/hour} &= (A) \times (C) \\ \text{tons PM/PM-10/yr} &= (B) \times (C) \times (1 \text{ ton}/2000 \text{ lbs})\end{aligned}$$

where,

A = maximum hourly amount of asphalt loaded, tons

B = the annual rolling, 12-month summation of the amount of asphalt loaded, in tons

C = PE/PM-10 emission factor of 0.0121 lbs/ton, detailed in PTI application 14-05627, received October 4, 2004.

If required, compliance shall be determined using the following methods:

For PM, Method 5A of 40 CFR Part 60, Appendix A.

For PM-10, Method 201 of 40 CFR Part 51, Appendix M.

c. Emission Limitation:

Emissions of volatile organic compounds (VOC) shall not exceed 10.0 pounds per hour and 21.91 TPY based on a rolling, 12-month summation.

Applicable Compliance Method:

VOC emissions limitations were calculated using the following equation:

$$\begin{aligned}\text{lbs VOC/hour} &= (A) \times (C) \\ \text{tons VOC/yr} &= (B) \times (C) \times (1 \text{ ton}/2000 \text{ lbs})\end{aligned}$$

where,

A = maximum hourly amount of asphalt loaded, tons

B = the annual rolling, 12-month summation of the amount of asphalt loaded, in tons

C = VOC emission factor of 0.0428 lbs/ton, detailed in PTI application 14-05627, received October 4, 2004.

If required, compliance shall be determined using the following method:

Method 18 or 25 of 40 CFR Part 60, Appendix A.

d. Emissions Limitations:

Emissions of carbon monoxide (CO) shall not exceed 0.13 pound per hour and 0.28 TPY based on a rolling, 12-month summation.



Applicable Compliance Method:

CO emissions limitations were calculated using the following equation:

$$\begin{aligned} \text{lbs CO/hour} &= (A) \\ \text{tons CO/yr} &= (A) / (B) \times (C) \times (1 \text{ ton}/2000 \text{ lbs}) \end{aligned}$$

where,

A = hourly emission rate of 0.13 lb/hr, detailed in PTI application 14-05627, received October 4, 2004.

B = maximum hourly asphalt throughput of 233.75 tons/hour, detailed in PTI application 14-05627, received October 4, 2004.

C = annual asphalt throughput.

$$0.13 \text{ lbs of CO/hr} \times \text{hr}/233.75 \text{ tons asphalt} \times 1023825 \text{ tons asphalt/year} \times \text{ton}/2000 \text{ pounds} = 0.28 \text{ TPY}$$

Annual compliance is based on a rolling, 12-month summation.

If required, compliance shall be determined using the following method:

Method 10 or 10B of 40 CFR Part 60, Appendix A.

- e. Emission Limitations:
Emissions of hydrogen sulfide (H₂S) shall not exceed 0.16 pound per hour and 0.35 TPY based on a rolling, 12-month summation.

Applicable Compliance Method:

H₂S emissions limitations were calculated using the following equation:

$$\begin{aligned} \text{lbs H}_2\text{S/hour} &= (A) \\ \text{tons H}_2\text{S/yr} &= (A) / (B) \times (C) \times (1 \text{ ton}/2000 \text{ lbs}) \end{aligned}$$

where,

A = hourly emission rate of 0.16 lb/hr, detailed in PTI application 14-05627, received October 4, 2004.

B = maximum hourly asphalt throughput of 233.75 tons/hour, detailed in PTI application 14-05627, received October 4, 2004.

C = annual asphalt throughput

$$0.16 \text{ lbs of H}_2\text{S/hr} \times \text{hr}/233.75 \text{ tons asphalt} \times 1023825 \text{ tons asphalt/year} \times \text{ton}/2000 \text{ pounds} = 0.25 \text{ TPY}$$

Annual compliance is based on a rolling, 12-month summation.

If required, compliance shall be determined using the following method:

Method 15 of 40 CFR Part 60, Appendix A.



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(2) Compliance with the rolling, 12-month production limitation in section c)(1) shall be demonstrated by the record keeping in section d)(1).

g) Miscellaneous Requirements

(1) Modeling to demonstrate compliance with the Ohio EPA's "Air Toxic Policy" was not necessary because the emissions unit's maximum annual emissions for each toxic compound will be less than 1.0 ton. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any pollutant that has a listed TLV to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new permit to install.



2. Emissions Unit Group -Tanks 1, 2, 3, 4 and 7: T005, T006, T007, T008, T009,

EU ID	Operations, Property and/or Equipment Description
T005	1,000,000 gallon fixed roof tank with fiber bed filter and carbon filter
T006	1,000,000 gallon fixed roof tank with mist eliminator and carbon filter
T007	1,000,000 gallon fixed roof tank with fiber bed filter and carbon filter
T008	1,000,000 gallon fixed roof tank with fiber bed filter and carbon filter
T009	5,200,000 gallon fixed roof tank with fiber bed filter and carbon filter

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) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	<p>The following emissions limitations shall not be exceeded for each of the following emissions units: T005, T006, T007, T008 and T009.</p> <p>Volatile organic compound (VOC) emissions shall not exceed 2.36 TPY.</p> <p>Particulate emissions (PE) and Particulate emissions 10 microns and less in diameter (PM10) shall not exceed 0.27 TPY.</p> <p>Carbon monoxide (CO) emissions shall not exceed 0.55 TPY.</p>



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		Hydrogen Sulfide (H ₂ S) emissions shall not exceed 0.68 TPY. The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A)(1) and OAC rule 3745-21-09(L).
b.	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from any stack shall not exceed 20 percent opacity as a six-minute average, except as specified by rule.
c.	OAC rule 3745-17-11	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05 (A)(3).
d.	OAC rule 3745-21-09(L)	See d)(6) and e)(4).
e.	40 CFR Part 60, Subpart Ka	Exempt pursuant to 40 CFR 60.115a(d)(1). See e)(3)

(2) Additional Terms and Conditions

a. Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by use of a fiber bed filter with a 90% PE control efficiency and a carbon filter with a 75% VOC control efficiency, and compliance with the opacity limitation and the mass emission limitations.

c) Operational Restrictions

(1) The permittee shall operate, and maintain a fiber bed filter to control particulate emissions, and a carbon filter to control VOC emissions from this emissions unit. The fiber bed filter and carbon filter shall be operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s).

d) Monitoring and/or Recordkeeping Requirements

(1) The pressure drop across the fiber bed filter shall be maintained within the range of 0.1 to 5 inches of water while each emissions unit is in operation.

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



- (3) The lower explosive limit (LEL) in the vapor space of each emissions unit, shall not exceed 20 percent of the lower explosive limit (LEL) while each emissions unit is in operation.
- (4) The permittee shall monitor the LEL in the vapor space of each emissions unit on a monthly basis. 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 monthly records of the following information:
 - a. the monthly % LEL reading;
 - b. the annual average % LEL reading.
- (5) The permittee shall monitor the LEL at the outlet of the carbon filter used to control VOC emissions from this emissions unit on a monthly basis, and replace the filter as necessary. The permittee shall maintain records of the dates of inspection and the dates of filter replacement. The permittee shall maintain monthly records of the monthly % LEL reading. If the monthly LEL reading exceeds 20%, the permittee shall replace the carbon.
- (6) The permittee shall maintain records of the following for each emissions unit:
 - a. the types of petroleum liquids stored in the tank; and
 - b. the maximum true vapor pressure (in pounds per square inch absolute), as stored, of each liquid that has a maximum true vapor pressure greater than 1.0 pound per square inch absolute.

These records shall be maintained for at least 5 years and shall be made available to the Director or his representative upon verbal or written request.

e) Reporting Requirements

- (1) 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.



- (2) 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.
- (3) If the permittee places, stores, or holds any petroleum liquid with a true vapor pressure which is greater than 1.0 pound per square inch absolute, the permittee shall so notify the Director (the Southwest Ohio Air Quality Agency) and shall comply with all applicable sections of 40 CFR, Part 60, Subpart Ka within 30 days of becoming aware of the occurrence.
- (4) If the permittee places, stores, or holds any petroleum liquid with a true vapor pressure which is greater than 1.52 pound per square inch absolute, the permittee shall so notify the Director (the Southwest Ohio Air Quality Agency) and shall comply with, but not limited to, all applicable sections of OAC rule 3745-21-09(L) within 30 days of becoming aware of the occurrence.

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. Emissions Limitation:

Visible particulate emissions from any stack shall not exceed 20 percent opacity as a six-minute average, except as specified by rule.

Applicable compliance method:

Compliance with the stack visible particulate emissions limitation shall be determined through visible emissions observations performed in accordance U.S. EPA Method 9.

- b. Emissions Limitations:

Emissions of volatile organic compounds (VOC) shall not exceed 2.36 tons per year from each emissions unit.

Applicable compliance method:

$$\text{VOC emissions} = (\text{VOC concentration}) \times (1-.5) \times (60 \text{ cfm}) \times (60 \text{ min/hr}) \times (8760 \text{ hr/yr}) \times (1 \text{ lb}/454,000 \text{ mg})$$

$$\text{VOC concentration} = (\%LEL) \times (1-\text{fraction methane/ethane}) \times (45\text{mg/l}) \times (28.32 \text{ l/cf}) \times (1 \text{ lb}/454,000 \text{ mg})$$

$$\text{VOC concentration} = (.20) \times (1-0) \times (45 \text{ mg/l}) \times (28.32 \text{ l/cf}) \times (1 \text{ lb}/454,000 \text{ mg}) = 0.0006 \text{ lb/cf}$$



Uncontrolled VOC emissions = $(0.0006 \text{ lb/cf}) \times (60 \text{ cfm}) \times (60 \text{ min/hr}) \times (8760 \text{ hr/yr}) \times (\text{ton}/2000 \text{ lbs}) = 9.46 \text{ TPY}$.

VOC emissions are controlled by a carbon filter with 75% control efficiency.

Controlled VOC emissions = $9.46 \text{ TPY} \times (1-.75) = 2.36 \text{ TPY VOC}$

c. Emissions Limitations:

Emissions of particulate matter (PM) and particulate matter 10 microns and less (PM-10) in diameter shall not exceed 0.27 ton per year.

Applicable compliance method:

Annual PM/PM-10 emissions shall be determined by using the following equations:

Uncontrolled Particulate emissions are estimated to be 28.2 % of the uncontrolled VOC emissions.

$9.46 \text{ TPY VOC} \times .282 = 2.66 \text{ TPY PE}$

Particulate emissions are controlled by a mist eliminator with 90% control efficiency.

$2.66 \text{ TPY PE} \times (1-.9) = 0.27 \text{ TPY}$

d. Emissions Limitations:

Carbon monoxide (CO) emissions shall not exceed 0.55 TPY.

Applicable Compliance Method:

CO emissions were calculated with the following equation:

CO emissions = $AP-42 \text{ EF} \times \text{CO conc.} \times 0.028 \text{ m}^3/\text{cf} \times 1 \text{ lb}/454000 \text{ mg} \times \text{cfm} \times 60 \text{ min/hr} \times 8760 \text{ hr/year}$

CO emissions = $1.14 \text{ mg}/\text{m}^3/\text{ppm} \times 500 \text{ ppm} \times 0.028 \text{ m}^3/\text{cf} \times 1 \text{ lb}/454000 \text{ mg} \times 60 \text{ cfm} \times 60 \text{ min/hr} \times 8760 \text{ hr/yr} \times \text{ton}/2000 \text{ lb} = 0.55 \text{ TPY}$.

e. Emissions Limitations:

Hydrogen Sulfide (H₂S) emissions shall not exceed 0.68 TPY.

Applicable Compliance Method:

H₂S emissions were calculated with the following equation:

H₂S emissions = $AP-42 \text{ EF} \times \text{H}_2\text{S conc.} \times 0.028 \text{ m}^3/\text{cf} \times 1 \text{ lb}/454000 \text{ mg} \times \text{cfm} \times 60 \text{ min/hr} \times 8760 \text{ hr/year}$



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H_2S emissions = $1.39 \text{ mg/m}^3/\text{ppm} \times 500 \text{ ppm} \times 0.028 \text{ m}^3/\text{cf} \times 1 \text{ lb}/454000 \text{ mg} \times 60 \text{ cfm} \times 60 \text{ min/hr} \times 8760 \text{ hr/yr} \times \text{ton}/2000 \text{ lb} = 0.68 \text{ TPY}$.

- (2) Compliance with the pressure drop range in d)(1) shall be demonstrated by the record keeping in d)(2).
 - (3) Compliance with the % LEL limitation in d)(3) shall be demonstrated by the record keeping in d)(4).
- g) Miscellaneous Requirements
- (1) None.