

Synthetic Minor Determination and/or Netting Determination

Permit To Install 14-05627

A. Source Description

Owens Corning proposes to convert the existing asphalt processing plant, which uses blowing stills to oxidize asphalt, into an asphalt terminal which will handle only non-oxidized asphalt.

B. Facility Emissions and Attainment Status

Owens Corning is located in Hamilton County which is in primary non-attainment for ozone and NOx. The facility is an existing Synthetic Minor, but with the conversion to asphalt terminal operations, potential emissions of VOC will be in excess of 100 tons per year. This facility will be made a Synthetic Minor by limiting the amount of asphalt loaded out.

C. Source Emissions

VOC emissions from asphalt loading at maximum (J001)	43.82 tons/yr
VOC emissions from storage tanks at maximum (T005 - T009)	22.15 tons yr
VOC emissions from storage tanks at maximum (T011, T012 T015, T016)	<u>35.40 tons/yr</u>
Maximum Potential	101.37 tons/yr

VOC emissions from asphalt loading limit of 1,023,825 tons/yr (J001)	21.91 tons/yr
VOC emissions from storage tanks at maximum (T005 - T009)	22.15 tons yr
VOC emissions from storage tanks at maximum (T011, T012 T015, T016)	<u>35.40 tons/yr</u>
Maximum Potential	79.46 tons/yr

D. Conclusion

VOC emissions will be limited to 79.41 tons per year by limiting the maximum amount of asphalt loaded out through emissions unit J001 to 1,023,825 tons per year. Monthly record keeping and quarterly reporting will be required to track compliance. Emissions of VOC will be below 100 tons per year, therefore this permit will not be subject to nonattainment NSR or Title V.



State of Ohio Environmental Protection Agency

**RE: DRAFT PERMIT TO INSTALL
HAMILTON COUNTY**

CERTIFIED MAIL

Street Address:

Lazarus Gov. Center TELE: (614) 644-3020 FAX: (614) 644-2329

Mailing Address:

Lazarus Gov.
Center

Application No: 14-05627

Fac ID: 1431302438

DATE: 12/28/2004

OC Trumbull Asphalt
Nick Moran
10100 Brower Rd
North Bend, OH 45052-9760

You are hereby notified that the Ohio Environmental Protection Agency has made a draft action recommending that the Director issue a Permit to Install for the air contaminant source(s) [emissions unit(s)] shown on the enclosed draft permit. This draft action is not an authorization to begin construction or modification of your emissions unit(s). The purpose of this draft is to solicit public comments on the proposed installation. A public notice concerning the draft permit will appear in the Ohio EPA Weekly Review and the newspaper in the county where the facility will be located. Public comments will be accepted by the field office within 30 days of the date of publication in the newspaper. Any comments you have on the draft permit should be directed to the appropriate field office within the comment period. A copy of your comments should also be mailed to Robert Hodanbosi, Division of Air Pollution Control, Ohio EPA, P.O. Box 1049, Columbus, OH, 43266-0149.

A Permit to Install may be issued in proposed or final form based on the draft action, any written public comments received within 30 days of the public notice, or record of a public meeting if one is held. You will be notified in writing of a scheduled public meeting. Upon issuance of a final Permit to Install a fee of **\$5800** will be due. Please do not submit any payment now.

The Ohio EPA is urging 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 Pollution Prevention at (614) 644-3469. If you have any questions about this draft permit, please contact the field office where you submitted your application, or Mike Ahern, Field Operations & Permit Section at (614) 644-3631.

Sincerely,

Michael W. Ahern

Michael W. Ahern, Manager
Permit Issuance and Data Management Section
Division of Air Pollution Control

CC: USEPA

HCDES

OH-KY-IN Regional Council of Gov.

IN

KY



**Permit To Install
Terms and Conditions**

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

DRAFT PERMIT TO INSTALL 14-05627

Application Number: 14-05627
Facility ID: 1431302438
Permit Fee: **To be entered upon final issuance**
Name of Facility: OC Trumbull Asphalt
Person to Contact: Nick Moran
Address: 10100 Brower Rd
North Bend, OH 450529760

Location of proposed air contaminant source(s) [emissions unit(s)]:
**10100 Brower Rd
North Bend, Ohio**

Description of proposed emissions unit(s):
Asphalt loading rack, five fixed roof storage tanks with fiber bed filter and carbon filter, four fixed roof storage tanks with mist eliminator.

The above named entity is hereby granted a Permit to Install for the above described emissions unit(s) 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 above described emissions unit(s) of environmental pollutants will operate in compliance with applicable State and Federal laws and regulations, and does not constitute expressed or implied assurance that if constructed or modified in accordance with those plans and specifications, the above described emissions unit(s) of pollutants will be granted the necessary permits to operate (air) or NPDES permits as applicable.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Director

OC Trumbull Asphalt

Facility ID: 1431302438

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Part I - GENERAL TERMS AND CONDITIONS

A. Permit to Install General Terms and Conditions

1. Compliance Requirements

The emissions unit(s) identified in this Permit to Install shall remain in full compliance with all applicable State laws and regulations and the terms and conditions of this permit.

2. Reporting Requirements

The permittee shall submit required reports in the following manner:

- a. Reports of any required monitoring and/or recordkeeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
- b. Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the appropriate Ohio EPA District Office or local air agency. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

3. Records Retention Requirements

Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.

4. Inspections and Information Requests

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon the premises of this source at any reasonable time for purposes of making inspections, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State air pollution laws and regulations and the terms and conditions of this permit. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any

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information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

5. Scheduled Maintenance/Malfunction Reporting

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction of any emissions units or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s).

6. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The appropriate Ohio EPA District Office or local air agency must be notified in writing of any transfer of this permit.

7. Air Pollution Nuisance

The air contaminants emitted by the emissions units covered by this permit shall not cause a public nuisance, in violation of OAC rule 3745-15-07.

8. Termination of Permit to Install

This Permit to Install shall terminate within eighteen months of the effective date of the Permit to Install if the owner or operator has not undertaken a continuing program of installation or modification or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation or modification. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.

9. Construction of New Sources(s)

The proposed emissions unit(s) shall be constructed in strict accordance with the plans and application submitted for this permit to the Director of the Ohio Environmental Protection Agency. There may be no deviation from the approved plans without the express, written approval of the Agency. Any deviations from the approved plans or the above conditions may lead to such sanctions

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and penalties as provided under Ohio law. Approval of these plans does not constitute an assurance that the proposed facilities will operate in compliance with all Ohio laws and regulations. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed sources cannot meet the requirements of this permit or cannot meet applicable standards.

If the construction of the proposed emissions unit(s) has already begun or has been completed prior to the date the Director of the Environmental Protection Agency approves the permit application and plans, the approval does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the approved plans. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of OAC rule 3745-31-02. Furthermore, issuance of the Permit to Install does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Approval of the plans in any case is not to be construed as an approval of the facility as constructed and/or completed. Moreover, issuance of the Permit to Install is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities cannot meet the requirements of this permit or cannot meet applicable standards.

10. Public Disclosure

The facility is hereby notified that this permit, and all agency records concerning the operation of this permitted source, are subject to public disclosure in accordance with OAC rule 3745-49-03.

11. Applicability

This Permit To Install is applicable only to the emissions unit(s) identified in the Permit To Install. Separate Permit To Install for the installation or modification of any other emissions unit(s) are required for any emissions unit for which a Permit To Install is required.

12. Best Available Technology

As specified in OAC Rule 3745-31-05, all new sources must employ Best Available Technology (BAT). Compliance with the terms and conditions of this permit will fulfill this requirement.

13. Source Operation and Operating Permit Requirements After Completion of Construction

This facility is permitted to operate each source described by this Permit to Install for a period of up to one year from the date the source commenced operation. This permission to operate is

OC Trumbull Asphalt

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granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws, regulations, and policies. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within ninety (90) days after commencing operation of the emissions unit(s) covered by this permit.

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14. Construction Compliance Certification

The applicant shall provide Ohio EPA with a written certification (see enclosed form) that the facility has been constructed in accordance with the Permit to Install application and the terms and conditions of the Permit to Install. The certification shall be provided to Ohio EPA upon completion of construction but prior to startup of the source.

15. Fees

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78. The permittee shall pay all applicable Permit to Install fees within 30 days after the issuance of this Permit to Install.

B. Permit to Install Summary of Allowable Emissions

The following information summarizes the total allowable emissions, by pollutant, based on the individual allowable emissions of each air contaminant source identified in this permit.

SUMMARY (for informational purposes only)
TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

<u>Pollutant</u>	<u>Tons Per Year</u>
PM/PM-10	8.43
VOC	79.46
CO	5.41
H ₂ S	6.65

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PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	
J001 - asphalt loading rack	OAC rule 3745-31-05(A)(3)	OAC rule 3745-17-07(A)(1)
		OAC rule 3745-17-11(B)
		OAC rule 3745-21-07(G)
		OAC rule 3745-31-05(C)

OC T1

PTI A

Emissions Unit ID: **J001**

Issued: To be entered upon final issuance

Applicable Emissions
Limitations/Control Measures

Particulate emissions (PM) and particulate emissions less than 10 microns (PM-10) shall not exceed 2.82 pounds per hour.

Volatile Organic Compound (VOC) emissions shall not exceed 10.0 pounds per hour.

Carbon Monoxide (CO) emissions shall not exceed 0.13 pound per hour.

Hydrogen Sulfide (H₂S) emissions shall not exceed 0.16 pound per hour.

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.

The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A)(1) and 3745-31-05(C).

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

The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05 (A)(3).

exempt

Particulate emissions (PM) and particulate emissions less than 10 microns (PM-10) shall not exceed 6.18 tons per year, based upon a rolling, 12-month summation.

Volatile Organic Compound (VOC) emissions shall not exceed 21.91 tons per year, based upon a rolling, 12-month summation.

Carbon Monoxide (CO) emissions shall not exceed 0.28 ton per year, based upon a rolling, 12-month summation.

Hydrogen Sulfide (H₂S) emissions shall not exceed 0.35 ton per year, based upon a rolling, 12-month summation.

See term and condition B.1.

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Facility ID: 1431302438

Emissions Unit ID: **J001**

2. Additional Terms and Conditions

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

B. Operational Restrictions

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

To ensure enforceability during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed the throughput levels specified in the following table:

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<u>Month</u>	<u>Maximum Allowable Cumulative Throughput in Tons</u>
1	85,319
1-2	170,638
1-3	255,956
1-4	341,275
1-5	426,594
1-6	511,913
1-7	597,231
1-8	682,550
1-9	767,869
1-10	853,188
1-11	938,506
1-12	1,023,825

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual production rate limitation shall be based upon a rolling, 12-month summation of the asphalt loading rates.

C. 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. beginning after the first 12 calendar months of operation following the issuance of this permit, the rolling, 12-month summation, in tons of the asphalt throughput.

Also, during the first 12 calendar months of operation following the issuance of this permit, the permittee shall record the cumulative material throughput rate for each calendar month.

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).

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OC T1

PTI A

Issued: To be entered upon final issuance

Emissions Unit ID: **J001**

OC T1**PTI A**Emissions Unit ID: **J001****Issued: To be entered upon final issuance****D. Reporting Requirements**

1. The permittee shall submit deviation (excursion) reports which identify all exceedances of the following:
 - a. an identification of all exceedances of the rolling, 12-month asphalt throughput restriction, and for the first 12 calendar months of operation following issuance of this permit, all exceedances of the maximum allowable cumulative throughput levels; and
 - b. an identification of all exceedances of the rolling, 12-month emission limitations for VOC, PM, PM10, CO, H₂S.
2. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.
3. The permittee shall submit quarterly reports which identify the updated rolling, 12-month summation of VOC emissions for each calendar month for this emissions unit. The reports shall be submitted to the Director (the Hamilton County Department of Environmental Services) by January 31, April 30, July 31 and October 31 of each year and shall cover the previous three calendar months (October through December, January through March, April through June and July through September, respectively).

E. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.1 of these terms and conditions shall be determined in accordance with the following method(s):

Emission Limitation:

20% opacity, as a six-minute average

Applicable compliance method:

If required, compliance shall be determined in accordance with Test Method 9, as set forth in "Appendix on Test Methods" in 40 CFR Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 2002, except as specified by rule.

2. Emission Limitation:

2.82 lb/hr PM/PM-10, 6.18 tons/yr PM/PM-10

Emissions Unit ID: **J001**

Applicable Compliance Method:

PM and PM-10 emissions shall be calculated and compliance determined by 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 amount of asphalt loaded, 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.

3. Emission Limitation:

10.0 lbs/hr VOC, 21.91 tons/yr VOC

Applicable Compliance Method:

VOC emissions shall be calculated and compliance determined by 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 amount of asphalt loaded, 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.

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4. Emission Limitation:

0.13 lb/hr CO, 0.28 tons/yr CO

Applicable Compliance Method:

CO emissions shall be calculated and compliance determined by using the following equation:

lbs CO/hour = (A)

tons CO/yr = (A) / (B) x (C) x (1 ton/2000 lbs)

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.

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

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

5. Emission Limitation:

0.16 lb/hr H₂S, 0.35 ton/yr H₂S

Applicable Compliance Method:

H₂S emissions shall be calculated and compliance determined by using the following equation:lbs H₂S/hour = (A)tons H₂S/yr = (A) / (B) x (C) x (1 ton/2000 lbs)

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

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

Method 15 of 40 CFR Part 60, Appendix A.

6. Compliance with the production limitation in term B.1 shall be demonstrated by the record keeping in term C.1.

F. Miscellaneous Requirements

1. The terms and conditions listed in this permit to install shall supersede all the air pollution control requirements for this emissions unit contained in permit to install 14-05510 as issued on May 27, 2004.
2. The following terms and conditions of this permit are federally enforceable: A, B, C, D and E.
3. Air Toxic Policy Clarifying Language

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 result in an increase in emissions of any pollutant that has a listed TLV to above 1.0 ton per year may require the permittee to apply for and obtain a new permit to install.

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PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>
T005 - 1,000,000 gallon fixed roof tank with fiber bed filter and carbon filter	<p>OAC rule 3745-31-05(A)(3)</p> <p>OAC rule 3745-17-07(A)</p> <p>OAC rule 3745-17-11</p> <p>OAC rule 3745-21-09(L)</p> <p>40 CFR Part 60, Subpart Ka</p> <p>OAC rule 3745-31-05(C)</p>

Applicable Emissions
Limitations/Control Measures

Particulate emissions (PM) and particulate emissions less than 10 microns (PM-10) shall not exceed 0.14 pound per hour.

Volatile Organic Compound (VOC) emissions shall not exceed 2.53 pounds per hour.

Carbon Monoxide (CO) emissions shall not exceed 0.13 pound per hour and 0.57 ton per year.

Hydrogen Sulfide (H₂S) emissions shall not exceed 0.16 pound per hour and 0.70 ton per year.

The hourly and annual, except for PM, PM10, and VOC, emission limitation(s) outlined are based upon the emissions unit's Potential to Emit (PTE). Therefore, no hourly and annual records are required to demonstrate compliance with these limits.

The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A), OAC rule 3745-21-09(L), and OAC 3745-31-05(C).

Visible particulate emissions shall not exceed 20% opacity, as a six-minute average, except as

specified by rule.

The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05 (A)(3).

See terms and conditions C.3 and D.4.

Exempt pursuant to 40 CFR 60.115a(d)(1).

Particulate emissions (PM) and particulate emissions less than 10 microns (PM-10) shall not exceed 0.25 ton per year, based upon a rolling, 12-month summation.

Volatile Organic Compound (VOC) emissions shall not exceed 4.43 tons per year, based upon a rolling, 12-month summation.

See terms and conditions B.2 and B.3.

Issued: To be entered upon final issuance**2. Additional Terms and Conditions**

- 2.a** Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by use of a fiber bed filter with a 90% PM control efficiency and a carbon filter with a 50% VOC control efficiency, and compliance with the opacity limitation and the mass emission limitations.

B. Operational Restrictions

1. The permittee shall install, 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 installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s).
2. The pressure drop across the fiber bed filter shall be maintained within the range of 0.1 to 5 inches of water while the emissions unit is in operation.
3. The lower explosive limit (LEL) shall not exceed 23 mg/liter while the emissions unit is in operation.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall properly install, 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 installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the fiber bed on a daily basis.
2. The permittee shall perform semi-annual inspections of the carbon filter used to control VOC emissions from this emissions unit, and replace the filter as necessary. The permittee shall maintain records of the dates of inspection and the dates of filter replacement.
3. The permittee shall maintain records of the following:
 - 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.
4. The permittee shall monitor the LEL) in the vapor space of this emissions unit on a monthly basis. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance

Emissions Unit ID: **T005**

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;
- c. the PM, PM10, and VOC emissions in tons; and
- d. the updated rolling, 12-month summation emissions total, in tons, for PM, PM10, and VOC (the total amount of emissions for the current month plus the total amount of emissions for the previous eleven calendar months).

D. Reporting Requirements

1. 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 Hamilton County Department of Environmental Services) and shall comply with all applicable sections of 40 CFR, Part 60, Subpart Ka within 30 days of becoming aware of the occurrence.
2. If the permittee places, stores, or holds any petroleum liquid with a true vapor pressure which is greater than 1.5 pound per square inch absolute, the permittee shall so notify the Director (the Hamilton County Department of Environmental Services) and shall comply with, but not limited to, all applicable sections of both OAC rule 3745-21-09(L) and 40 CFR, Part 60, Subpart Ka within 30 days of becoming aware of the occurrence.
3. The permittee shall submit pressure drop quarterly deviation (excursion) reports that identify all periods of time during which the pressure drop across the fiber bed filter did not comply with the allowable range specified in term and condition B.2.
4. The permittee shall submit LEL quarterly deviation (excursion) reports that identify all periods of time during which the LEL value exceeded the value specified in term and condition B.3.
5. The permittee shall submit quarterly deviation (excursion) reports that identify of all exceedances of the rolling, 12-month emission limitations for PM, PM10, and VOC.
6. The quarterly deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.
7. The permittee shall submit annual reports to the Hamilton County Department of Environmental Services which identify the dates of inspection and/or replacement of the carbon filters in this

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emissions unit. These reports shall be submitted by January 31 of each year, and shall cover the previous twelve month period (January through December).

8. The permittee shall submit annual reports which specify the total VOC emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year, and shall cover the previous twelve month period (January through December).

E. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.1 of these terms and conditions shall be determined in accordance with the following method(s):

Emission Limitation:

20% opacity, as a six-minute average

Applicable compliance method:

Compliance shall be determined in accordance with Test Method 9, as set forth in "Appendix on Test Methods" in 40 CFR Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 2002, except as specified by rule.

2. Emission Limitation:

0.14 lb/hr PM/PM-10, 0.25 ton/yr PM/PM-10, based upon a rolling, 12-month summation.

Applicable compliance method:

PM/PM-10 emissions shall be calculated and compliance determined by using the following equations:

$$\text{lbs PM/PM-10/hour} = (A) \times (1-C)$$

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

where,

A = hourly emission rate of 1.425 lb/hr, detailed in PTI application 14-05627, received October 4, 2004.

B = the annual hours operated

C = filterbed PM/PM-10 control efficiency of 90% (0.90)

Emissions Unit ID: T005

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

For PM, Method 5A of 40 CFR Part 60, Appendix A.
For PM-10, Method 201 of 40 CFR Part 51, Appendix M.

3. Emission Limitation:

2.53 lb/hr VOC, 4.43 tons/yr VOC. based upon a rolling, 12-month summation.

Applicable compliance method:

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

- a. The emission testing shall be conducted within six months of issuance of this permit.
- b. The emission testing shall be conducted to demonstrate compliance with the allowable VOC mass emission rate and the 50% control efficiency listed in term A.2.a of this emissions unit.
- c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): for VOC, Methods 1 thru 4 and 10 or 25 of 40 CFR Part 60, Appendix A. "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 "OAC rule 3745-21-10" or the approved alternative test protocol (e.g., "the mass balance protocol approved on 10/25/95"). 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." - if applicable. 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 the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA

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District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

Annual CO emissions shall be calculated and compliance determined by using the following equations:

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

where,

$$\begin{aligned} A &= \text{from the results of the emissions testing conducted per this term.} \\ B &= \text{maximum annual hours operated} \end{aligned}$$

4. Emission Limitation:

0.13 lb/hr CO, 0.57 ton/yr CO

Applicable compliance method:

CO emissions shall be calculated and compliance determined by using the following equations:

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

where,

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

Issued: To be entered upon final issuance

B = maximum annual hours operated

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

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

5. Emission Limitation:

0.16 lb/hr H₂S, 0.70 ton/yr H₂S

Applicable Compliance Method:

H₂S emissions shall be calculated and compliance determined by using the following equation:

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

where,

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

B = maximum annual hours operated

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

Method 15 of 40 CFR Part 60, Appendix A.

- 6. Compliance with term and condition B.2 shall be demonstrated by the record keeping in term and condition C.1.
- 7. Compliance with term and condition B.1 shall be demonstrated by the record keeping in term and condition C.1 and C.2.
- 8. Compliance with term and condition B.3 shall be demonstrated by the record keeping in term and condition C.4.

F. Miscellaneous Requirements

- 1. The terms and conditions listed in this permit to install shall supersede all the air pollution control requirements for this emissions unit contained in permit to install 14-05510 as issued on May 27, 2004.

OC Trumbull Asphalt
PTI Application: 14-05627
Issued

Facility ID: 1431302438

Emissions Unit ID: **T005**

2. The following terms and conditions of this permit are federally enforceable: A, B, C, D and E.

3. Air Toxic Policy Clarifying Language

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 result in an increase in emissions of any pollutant that has a listed TLV to above 1.0 ton per year may require the permittee to apply for and obtain a new permit to install.

Issued: To be entered upon final issuance

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>
T006 - 1,000,000 gallon fixed roof tank with fiber bed filter and carbon filter	OAC rule 3745-31-05(A)(3)
	OAC rule 3745-17-07(A)
	OAC rule 3745-17-11
	OAC rule 3745-21-09(L)
	40 CFR Part 60, Subpart Ka
	OAC rule 3745-31-05(C)

Issued: To be entered upon final issuance

Applicable Emissions
Limitations/Control Measures

Particulate emissions (PM) and particulate emissions less than 10 microns (PM-10) shall not exceed 0.14 pound per hour.

Volatile Organic Compound (VOC) emissions shall not exceed 2.53 pounds per hour.

Carbon Monoxide (CO) emissions shall not exceed 0.13 pound per hour and 0.57 ton per year.

Hydrogen Sulfide (H₂S) emissions shall not exceed 0.16 pound per hour and 0.70 ton per year.

The hourly and annual, except for PM, PM10 and VOC, emission limitation(s) outlined are based upon the emissions unit's Potential to Emit (PTE). Therefore, no hourly and annual records are required to demonstrate compliance with these limits.

The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A), OAC rule 3745-21-09(L), OAC rule 3745-31-05(C).

Visible particulate emissions shall not exceed 20% opacity, as a six-minute average, except as

specified by rule.

The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05 (A)(3).

See terms and conditions C.3 and D.4.

Exempt pursuant to 40 CFR 60.115a(d)(1).

Particulate emissions (PM) and particulate emissions less than 10 microns (PM-10) shall not exceed 0.25 ton per year, based upon a rolling, 12-month summation.

Volatile Organic Compound (VOC) emissions shall not exceed 4.43 tons per year, based upon a rolling, 12-month summation.

See terms and conditions B.2 and B.3.

2. Additional Terms and Conditions

- 2.a** Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by use of a fiber bed filter with a 90% PM control efficiency and a carbon filter with a 50% VOC control efficiency, and compliance with the opacity limitation and the mass emission limitations.

B. Operational Restrictions

1. The permittee shall install, 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 installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s).
2. The pressure drop across the fiber bed filter shall be maintained within the range of 0.1 to 5 inches of water while the emissions unit is in operation.
3. The lower explosive limit (LEL) shall not exceed 23 mg/liter while the emissions unit is in operation.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall properly install, 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 installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the fiber bed on a daily basis.
2. The permittee shall perform semi-annual inspections of the carbon filter used to control VOC emissions from this emissions unit, and replace the filter as necessary. The permittee shall maintain records of the dates of inspection and the dates of filter replacement.
3. The permittee shall maintain records of the following:
 - 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.
4. The permittee shall monitor the lower explosive limit (LEL) in the vapor space of this emissions unit on a monthly basis. The monitoring equipment shall be installed, calibrated, operated, and

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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;
- c. the PM, PM10, and VOC emissions in tons; and
- d. the updated rolling, 12-month summation emissions total, in tons, for PM, PM10, and VOC (the total amount of emissions for the current month plus the total amount of emissions for the previous eleven calendar months).

D. Reporting Requirements

1. 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 Hamilton County Department of Environmental Services) and shall comply with all applicable sections of 40 CFR, Part 60, Subpart Ka within 30 days of becoming aware of the occurrence.
2. If the permittee places, stores, or holds any petroleum liquid with a true vapor pressure which is greater than 1.5 pound per square inch absolute, the permittee shall so notify the Director (the Hamilton County Department of Environmental Services) and shall comply with, but not limited to, all applicable sections of both OAC rule 3745-21-09(L) and 40 CFR, Part 60, Subpart Ka within 30 days of becoming aware of the occurrence.
3. The permittee shall submit pressure drop quarterly deviation (excursion) reports that identify all periods of time during which the pressure drop across the fiber bed filter did not comply with the allowable range specified in term and condition B.2.
4. The permittee shall submit LEL quarterly deviation (excursion) reports that identify all periods of time during which the LEL value exceeded the value specified in term and condition B.3.
5. The permittee shall submit quarterly deviation (excursion) reports that identify of all exceedances of the rolling, 12-month emission limitations for PM, PM10, and VOC.
6. The quarterly deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.
7. The permittee shall submit annual reports to the Hamilton County Department of Environmental

Services which identify the dates of inspection and/or replacement of the carbon filters in this emissions unit. These reports shall be submitted by January 31 of each year, and shall cover the previous twelve month period (January through December).

8. The permittee shall submit annual reports which specify the total VOC emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year, and shall cover the previous twelve month period (January through December).

E. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.1 of these terms and conditions shall be determined in accordance with the following method(s):

Emission Limitation:

20% opacity, as a six-minute average

Applicable compliance method:

Compliance shall be determined in accordance with Test Method 9, as set forth in "Appendix on Test Methods" in 40 CFR Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 2002, except as specified by rule.

2. Emission Limitation:

0.14 lb/hr PM/PM-10, 0.25 ton/yr PM/PM-10, based upon a rolling, 12-month summation.

Applicable compliance method:

PM/PM-10 emissions shall be calculated and compliance determined by using the following equations:

$$\text{lbs PM/PM-10/hour} = (A) \times (1-C)$$

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

where,

A = hourly emission rate of 1.425 lb/hr, detailed in PTI application 14-05627, received October 4, 2004.

B = the annual hours operated

C = filterbed PM/PM-10 control efficiency of 90% (0.90)

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

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

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

3. Emission Limitation:

2.53 lb/hr VOC, 4.43 tons/yr VOC, based upon a rolling, 12-month summation.

Applicable compliance method:

VOC emissions shall be calculated and compliance determined by using the following equations:

$$\text{lbs VOC/hour} = (A) \times (1-C)$$

$$\text{tons VOC/yr} = (A) \times (B) \times (1 \text{ ton}/2000 \text{ lbs}) \times (1-C)$$

where,

A = hourly emission rate of 5.053 lb/hr, detailed in PTI application 14-05627, received October 4, 2004.

B = the annual hours operated

C = carbon filter control efficiency of 50% (0.50)

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

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

4. Emission Limitation:

0.13 lb/hr CO, 0.57 ton/yr CO

Applicable compliance method:

CO emissions shall be calculated and compliance determined by using the following equations:

$$\text{lbs CO/hour} = (A)$$

$$\text{tons CO/yr} = (A) \times (B) \times (1 \text{ ton}/2000 \text{ lbs})$$

where,

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PTI A

Emissions Unit ID: T006

Issued: To be entered upon final issuance

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

B = maximum annual hours operated

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

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

5. Emission Limitation:

0.16 lb/hr H₂S, 0.70 ton/yr H₂S

Applicable Compliance Method:

H₂S emissions shall be calculated and compliance determined by using the following equation:

lbs H₂S/hour = (A)

tons H₂S/yr = (A) x (B) x (1 ton/2000 lbs)

where,

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

B = maximum annual hours operated

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

Method 15 of 40 CFR Part 60, Appendix A.

6. Compliance with term and condition B.2 shall be demonstrated by the record keeping in term and condition C.1.
7. Compliance with term and condition B.1 shall be demonstrated by the record keeping in term and condition C.1 and C.2.
8. Compliance with term and condition B.3 shall be demonstrated by the record keeping in term and condition C.4.

F. Miscellaneous Requirements

1. The terms and conditions listed in this permit to install shall supersede all the air pollution control

OC Trumbull Asphalt
PTI Application: 14-05510
Issued

Facility ID: 1431302438

Emissions Unit ID: **T006**

requirements for this emissions unit contained in permit to install 14-05510 as issued on May 27, 2004.

2. The following terms and conditions of this permit are federally enforceable: A, B, C, D and E.
3. Air Toxic Policy Clarifying Language

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 result in an increase in emissions of any pollutant that has a listed TLV to above 1.0 ton per year may require the permittee to apply for and obtain a new permit to install.

Issued: To be entered upon final issuance

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>
T007 - 1,000,000 gallon fixed roof tank with fiber bed filter and carbon filter	OAC rule 3745-31-05(A)(3) OAC rule 3745-17-07(A) OAC rule 3745-17-11 OAC rule 3745-21-09(L) 40 CFR Part 60, Subpart Ka OAC rule 3745-3-05(C)

OC T₁

PTI A

Emissions Unit ID: T007

Issued: To be entered upon final issuanceApplicable Emissions
Limitations/Control Measures

Particulate emissions (PM) and particulate emissions less than 10 microns (PM-10) shall not exceed 0.14 pound per hour.

Volatile Organic Compound (VOC) emissions shall not exceed 2.53 pounds per hour .

Carbon Monoxide (CO) emissions shall not exceed 0.13 pound per hour and 0.57 ton per year.

Hydrogen Sulfide (H₂S) emissions shall not exceed 0.16 pound per hour and 0.70 ton per year.

The hourly and annual, except for PM, PM10, and VOC, emission limitation(s) outlined are based upon the emissions unit's Potential to Emit (PTE). Therefore, no hourly and annual records are required to demonstrate compliance with these limits.

The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A), OAC rule 3745-21-09(L), and OAC rule 3745-31-05(C).

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

The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05 (A)(3).

See terms and conditions C.3 and D.4.

Exempt pursuant to 40 CFR 60.115a(d)(1).

Particulate emissions (PM) and particulate emissions less than 10 microns (PM-10) shall not exceed 0.25 ton per year, based upon a rolling, 12-month summation.

Volatile Organic Compound (VOC) emissions shall not exceed 4.43 tons per year, based upon a rolling, 12-month summation.

See terms and conditions B.2 and B.3.

Issued: To be entered upon final issuance**2. Additional Terms and Conditions**

- 2.a** Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by use of a fiber bed filter with a 90% PM control efficiency and a carbon filter with a 50% VOC control efficiency, and compliance with the opacity limitation and the mass emission limitations.

B. Operational Restrictions

1. The permittee shall install, 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 installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s).
2. The pressure drop across the fiber bed filter shall be maintained within the range of 0.1 to 5 inches of water while the emissions unit is in operation.
3. The lower explosive limit (LEL) shall not exceed 23 mg/liter while the emissions unit is in operation.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall properly install, 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 installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the fiber bed on a daily basis.
2. The permittee shall perform semi-annual inspections of the carbon filter used to control VOC emissions from this emissions unit, and replace the filter as necessary. The permittee shall maintain records of the dates of inspection and the dates of filter replacement.
3. The permittee shall maintain records of the following:
 - 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.
4. The permittee shall monitor the lower explosive limit (LEL) in the vapor space of this emissions unit on a monthly basis. The monitoring equipment shall be installed, calibrated, operated, and

maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall maintain monthly records of the following information:

- a. the monthly LEL reading;
- b. the annual average LEL reading;
- c. the PM, PM10, and VOC emissions in tons; and
- d. the updated rolling, 12-month summation emissions total, in tons, for PM, PM10, and VOC (the total amount of emissions for the current month plus the total amount of emissions for the previous eleven calendar months).

Issued: To be entered upon final issuance**D. Reporting Requirements**

1. 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 Hamilton County Department of Environmental Services) and shall comply with all applicable sections of 40 CFR, Part 60, Subpart Ka within 30 days of becoming aware of the occurrence.
2. If the permittee places, stores, or holds any petroleum liquid with a true vapor pressure which is greater than 1.5 pound per square inch absolute, the permittee shall so notify the Director (the Hamilton County Department of Environmental Services) and shall comply with, but not limited to, all applicable sections of both OAC rule 3745-21-09(L) and 40 CFR, Part 60, Subpart Ka within 30 days of becoming aware of the occurrence.
3. The permittee shall submit pressure drop quarterly deviation (excursion) reports that identify all periods of time during which the pressure drop across the fiber bed filter did not comply with the allowable range specified in term and condition B.2.
4. The permittee shall submit LEL quarterly deviation (excursion) reports that identify all periods of time during which the LEL value exceeded the value specified in term and condition B.3.
5. The permittee shall submit quarterly deviation (excursion) reports that identify of all exceedances of the rolling, 12-month emission limitations for PM, PM10, and VOC.
6. The quarterly deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.
7. The permittee shall submit annual reports to the Hamilton County Department of Environmental Services which identify the dates of inspection and/or replacement of the carbon filters in this emissions unit. These reports shall be submitted by January 31 of each year, and shall cover the previous twelve month period (January through December).
8. The permittee shall submit annual reports which specify the total VOC emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year, and shall cover the previous twelve month period (January through December).

E. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.1 of these terms and conditions shall be determined in accordance with the following method(s):

Emission Limitation:

20% opacity, as a six-minute average

Applicable compliance method:

Compliance shall be determined in accordance with Test Method 9, as set forth in "Appendix on Test Methods" in 40 CFR Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 2002, except as specified by rule.

2. Emission Limitation:

0.14 lb/hr PM/PM-10, 0.25 ton/yr PM/PM-10, based upon a rolling, 12-month summation

Applicable compliance method:

PM/PM-10 emissions shall be calculated and compliance determined by using the following equations:

$$\text{lbs PM/PM-10/hour} = (A) \times (1-C)$$

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

where,

A = hourly emission rate of 1.425 lb/hr, detailed in PTI application 14-05627, received October 4, 2004.

B = the annual hours operated

C = filterbed PM/PM-10 control efficiency of 90% (0.90)

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

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

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

3. Emission Limitation:

2.53 lb/hr VOC, 4.43 tons/yr VOC, based upon a rolling, 12-month summation

Applicable compliance method:

VOC emissions shall be calculated and compliance determined by using the following equations:

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

where,

- A = hourly emission rate of 5.053 lb/hr, detailed in PTI application 14-05627, received October 4, 2004.
 B = the annual hours operated
 C = carbon filter control efficiency of 50% (0.50)

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

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

4. Emission Limitation:

0.13 lb/hr CO, 0.57 ton/yr CO

Applicable compliance method:

CO emissions shall be calculated and compliance determined by using the following equations:

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

where,

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

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

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

5. Emission Limitation:

0.16 lb/hr H₂S, 0.70 ton/yr H₂S

Applicable Compliance Method:

Issued: To be entered upon final issuance

H₂S emissions shall be calculated and compliance determined by using the following equation:

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

where,

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

B = maximum annual hours operated

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

Method 15 of 40 CFR Part 60, Appendix A.

6. Compliance with term and condition B.2 shall be demonstrated by the record keeping in term and condition C.1.
7. Compliance with term and condition B.1 shall be demonstrated by the record keeping in term and condition C.1 and C.2.
8. Compliance with term and condition B.3 shall be demonstrated by the record keeping in term and condition C.4.

F. Miscellaneous Requirements

1. The terms and conditions listed in this permit to install shall supersede all the air pollution control requirements for this emissions unit contained in permit to install 14-05510 as issued on May 27, 2004.
2. The following terms and conditions of this permit are federally enforceable: A, B, C, D and E.
3. Air Toxic Policy Clarifying Language

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 result in an increase in emissions of any pollutant that has a listed TLV to above 1.0 ton per year may require the permittee to apply for and obtain a new permit to install.

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>
T008 - 1,000,000 gallon fixed roof tank with fiber bed filter and carbon filter	OAC rule 3745-31-05(A)(3) OAC rule 3745-17-07(A) OAC rule 3745-17-11 OAC rule 3745-21-09(L) 40 CFR Part 60, Subpart Ka OAC 3745-31-05(C)

OC Trumbull Asphalt
PTI Application: 14-05627
Issued

Facility ID: 1431302438

Emissions Unit ID: **T008**

Applicable Emissions
Limitations/Control Measures

Particulate emissions (PM) and particulate emissions less than 10 microns (PM-10) shall not exceed 0.14 pound per hour.

Volatile Organic Compound (VOC) emissions shall not exceed 2.53 pounds per hour.

Carbon Monoxide (CO) emissions shall not exceed 0.13 pound per hour and 0.57 ton per year.

Hydrogen Sulfide (H₂S) emissions shall not exceed 0.16 pound per hour and 0.70 ton per year.

The hourly and annual, except for PM, PM10, and VOC, emission limitation(s) outlined are based upon the emissions unit's Potential to Emit (PTE). Therefore, no hourly and annual records are required to demonstrate compliance with these limits.

The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A), OAC rule 3745-21-09(L), and OAC rule 3745-31-05(C).

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

The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05 (A)(3).

See terms and conditions C.3 and D.4.

Exempt pursuant to 40 CFR 60.115a(d)(1).

Particulate emissions (PM) and particulate emissions less than 10 microns (PM-10) shall not exceed 0.25 ton per year, based upon a rolling, 12-month summation.

Volatile Organic Compound (VOC) emissions shall not exceed 4.43 tons per year, based upon a rolling, 12-month summation.

See terms and conditions B.2 and B.3.

Issued: To be entered upon final issuance**2. Additional Terms and Conditions**

- 2.a** Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by use of a fiber bed filter with a 90% PM control efficiency and a carbon filter with a 50% VOC control efficiency, and compliance with the opacity limitation and the mass emission limitations.

B. Operational Restrictions

1. The permittee shall install, 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 installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s).
2. The pressure drop across the fiber bed filter shall be maintained within the range of 0.1 to 5 inches of water while the emissions unit is in operation.
3. The lower explosive limit (LEL) shall not exceed 23 mg/liter while the emissions unit is in operation.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall properly install, 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 installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the fiber bed on a daily basis.
2. The permittee shall perform semi-annual inspections of the carbon filter used to control VOC emissions from this emissions unit, and replace the filter as necessary. The permittee shall maintain records of the dates of inspection and the dates of filter replacement.
3. The permittee shall maintain records of the following:
 - 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.
4. The permittee shall monitor the lower explosive limit (LEL) in the vapor space of this emissions unit on a monthly basis. The monitoring equipment shall be installed, calibrated, operated, and

maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall maintain monthly records of the following information:

- a. the monthly LEL reading;
- b. the annual average LEL reading;
- c. the PM, PM10, and VOC emissions in tons; and
- d. the updated rolling, 12-month summation emissions total, in tons, for PM, PM10, and VOC (the total amount of emissions for the current month plus the total amount of emissions for the previous eleven calendar months).

D. Reporting Requirements

1. 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 Hamilton County Department of Environmental Services) and shall comply with all applicable sections of 40 CFR, Part 60, Subpart Ka within 30 days of becoming aware of the occurrence.
2. If the permittee places, stores, or holds any petroleum liquid with a true vapor pressure which is greater than 1.5 pound per square inch absolute, the permittee shall so notify the Director (the Hamilton County Department of Environmental Services) and shall comply with, but not limited to, all applicable sections of both OAC rule 3745-21-09(L) and 40 CFR, Part 60, Subpart Ka within 30 days of becoming aware of the occurrence.
3. The permittee shall submit pressure drop quarterly deviation (excursion) reports that identify all periods of time during which the pressure drop across the fiber bed filter did not comply with the allowable range specified in term and condition B.2.
4. The permittee shall submit LEL quarterly deviation (excursion) reports that identify all periods of time during which the LEL value exceeded the value specified in term and condition B.3.
5. The permittee shall submit quarterly deviation (excursion) reports that identify of all exceedances of the rolling, 12-month emission limitations for PM, PM10, and VOC.
6. The quarterly deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.
7. The permittee shall submit annual reports to the Hamilton County Department of Environmental Services which identify the dates of inspection and/or replacement of the carbon filters in this

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emissions unit. These reports shall be submitted by January 31 of each year, and shall cover the previous twelve month period (January through December).

8. The permittee shall submit annual reports which specify the total VOC emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year, and shall cover the previous twelve month period (January through December).

E. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.1 of these terms and conditions shall be determined in accordance with the following method(s):

Emission Limitation:

20% opacity, as a six-minute average

Applicable compliance method:

Compliance shall be determined in accordance with Test Method 9, as set forth in "Appendix on Test Methods" in 40 CFR Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 2002, except as specified by rule.

2. Emission Limitation:

0.14 lb/hr PM/PM-10, 0.25 ton/yr PM/PM-10, based upon a rolling, 12-month summation.

Applicable compliance method:

PM/PM-10 emissions shall be calculated and compliance determined by using the following equations:

$$\text{lbs PM/PM-10/hour} = (A) \times (1-C)$$

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

where,

A = hourly emission rate of 1.425 lb/hr, detailed in PTI application 14-05627, received October 4, 2004.

B = the annual hours operated

C = filterbed PM/PM-10 control efficiency of 90% (0.90)

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

For PM, Method 5A of 40 CFR Part 60, Appendix A.
 For PM-10, Method 201 of 40 CFR Part 51, Appendix M.

3. Emission Limitation:

2.53 lb/hr VOC, 4.43 tons/yr VOC, based upon a rolling, 12-month summation.

Applicable compliance method:

VOC emissions shall be calculated and compliance determined by using the following equations:

$$\text{lbs VOC/hour} = (A) \times (1-C)$$

$$\text{tons VOC/yr} = (A) \times (B) \times (1 \text{ ton}/2000 \text{ lbs}) \times (1-C)$$

where,

- A = hourly emission rate of 5.053 lb/hr, detailed in PTI application 14-05627, received October 4, 2004.
 B = the annual hours operated
 C = carbon filter control efficiency of 50% (0.50)

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

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

4. Emission Limitation:

0.13 lb/hr CO, 0.57 ton/yr CO

Applicable compliance method:

CO emissions shall be calculated and compliance determined by using the following equations:

$$\text{lbs CO/hour} = (A)$$

$$\text{tons CO/yr} = (A) \times (B) \times (1 \text{ ton}/2000 \text{ lbs})$$

where,

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Emissions Unit ID: T008

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

B = maximum annual hours operated

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

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

5. Emission Limitation:

0.16 lb/hr H₂S, 0.70 ton/yr H₂S

Applicable Compliance Method:

H₂S emissions shall be calculated and compliance determined by using the following equation:

lbs H₂S/hour = (A)

tons H₂S/yr = (A) x (B) x (1 ton/2000 lbs)

where,

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

B = maximum annual hours operated

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

Method 15 of 40 CFR Part 60, Appendix A.

6. Compliance with term and condition B.2 shall be demonstrated by the record keeping in term and condition C.1.
7. Compliance with term and condition B.1 shall be demonstrated by the record keeping in term and condition C.1 and C.2.
8. Compliance with term and condition B.3 shall be demonstrated by the record keeping in term and condition C.4.

F. Miscellaneous Requirements

1. The terms and conditions listed in this permit to install shall supersede all the air pollution control

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requirements for this emissions unit contained in permit to install 14-05510 as issued on May 27, 2004.

2. The following terms and conditions of this permit are federally enforceable: A, B, C, D and E.
3. Air Toxic Policy Clarifying Language

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 result in an increase in emissions of any pollutant that has a listed TLV to above 1.0 ton per year may require the permittee to apply for and obtain a new permit to install.

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PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>
T009 - 5,200,000 gallon fixed roof tank with fiber bed filter and carbon filter	<p>OAC rule 3745-31-05(A)(3)</p> <p>OAC rule 3745-17-07(A)</p> <p>OAC rule 3745-17-11</p> <p>OAC rule 3745-21-09(L)</p> <p>40 CFR Part 60, Subpart Ka</p> <p>OAC rule 3745-31-05(C)</p>

Applicable Emissions
Limitations/Control Measures

Particulate emissions (PM) and particulate emissions less than 10 microns (PM-10) shall not exceed 0.14 pound per hour.

Volatile Organic Compound (VOC) emissions shall not exceed 2.53 pounds per hour.

Carbon Monoxide (CO) emissions shall not exceed 0.13 pound per hour and 0.57 ton per year.

Hydrogen Sulfide (H₂S) emissions shall not exceed 0.16 pound per hour and 0.70 ton per year.

The hourly and annual, except for PM, PM10, and VOC, emission limitation(s) outlined are based upon the emissions unit's Potential to Emit (PTE). Therefore, no hourly and annual records are required to demonstrate compliance with these limits.

The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A), OAC rule 3745-21-09(L), OAC rule 3745-31-05(C).

Visible particulate emissions shall not exceed 20% opacity, as a six-minute average, except as

specified by rule.

The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05 (A)(3).

See terms and conditions C.3 and D.4.

Exempt pursuant to 40 CFR 60.115a(d)(1).

Particulate emissions (PM) and particulate emissions less than 10 microns (PM-10) shall not exceed 0.25 ton per year, based upon a rolling, 12-month summation.

Volatile Organic Compound (VOC) emissions shall not exceed 4.43 tons per year, based upon a rolling, 12-month summation.

See terms and conditions B.2 and B.3.

Issued: To be entered upon final issuance**2. Additional Terms and Conditions**

- 2.a** Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by use of a fiber bed filter with a 90% PM control efficiency and a carbon filter with a 50% VOC control efficiency, and compliance with the opacity limitation and the mass emission limitations.

B. Operational Restrictions

1. The permittee shall install, 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 installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s).
2. The pressure drop across the fiber bed filter shall be maintained within the range of 0.1 to 5 inches of water while the emissions unit is in operation.
3. The lower explosive limit (LEL) shall not exceed 23 mg/liter while the emissions unit is in operation.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall properly install, 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 installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the fiber bed on a daily basis.
2. The permittee shall perform semi-annual inspections of the carbon filter used to control VOC emissions from this emissions unit, and replace the filter as necessary. The permittee shall maintain records of the dates of inspection and the dates of filter replacement.
3. The permittee shall maintain records of the following:
 - 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.
4. The permittee shall monitor the lower explosive limit (LEL) in the vapor space of this emissions unit on a monthly basis. The monitoring equipment shall be installed, calibrated, operated, and

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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; and
- c. the PM, PM10, and VOC emissions in tons;
- d. the updated rolling, 12-month summation emissions total, in tons, for PM, PM10, and VOC (the total amount of emissions for the current month plus the total amount of emissions for the previous eleven calendar months).

D. Reporting Requirements

1. 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 Hamilton County Department of Environmental Services) and shall comply with all applicable sections of 40 CFR, Part 60, Subpart Ka within 30 days of becoming aware of the occurrence.
2. If the permittee places, stores, or holds any petroleum liquid with a true vapor pressure which is greater than 1.5 pound per square inch absolute, the permittee shall so notify the Director (the Hamilton County Department of Environmental Services) and shall comply with, but not limited to, all applicable sections of both OAC rule 3745-21-09(L) and 40 CFR, Part 60, Subpart Ka within 30 days of becoming aware of the occurrence.
3. The permittee shall submit pressure drop quarterly deviation (excursion) reports that identify all periods of time during which the pressure drop across the fiber bed filter did not comply with the allowable range specified in term and condition B.2.
4. The permittee shall submit LEL quarterly deviation (excursion) reports that identify all periods of time during which the LEL value exceeded the value specified in term and condition B.3.
5. The permittee shall submit quarterly deviation (excursion) reports that identify of all exceedances of the rolling, 12-month emission limitations for PM, PM10, and VOC.
6. The quarterly deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.
7. The permittee shall submit annual reports to the Hamilton County Department of Environmental Services which identify the dates of inspection and/or replacement of the carbon filters in this emissions unit. These reports shall be submitted by January 31 of each year, and shall cover the previous twelve month period (January through December).
8. The permittee shall submit annual reports which specify the total VOC emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year, and shall cover the previous twelve month period (January through December).

E. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.1 of these terms and conditions shall be determined in accordance with the following method(s):

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Emission Limitation:

20% opacity, as a six-minute average

Applicable compliance method:

Compliance shall be determined in accordance with Test Method 9, as set forth in "Appendix on Test Methods" in 40 CFR Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 2002, except as specified by rule.

2. Emission Limitation:

0.14 lb/hr PM/PM-10, 0.25 ton/yr PM/PM-10, based upon a rolling, 12-month summation.

Applicable compliance method:

PM/PM-10 emissions shall be calculated and compliance determined by using the following equations:

$$\text{lbs PM/PM-10/hour} = (A) \times (1-C)$$

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

where,

A = hourly emission rate of 1.425 lb/hr, detailed in PTI application 14-05627, received October 4, 2004.

B = the annual hours operated

C = filterbed PM/PM-10 control efficiency of 90% (0.90)

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

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

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

3. Emission Limitation:

2.53 lb/hr VOC, 4.43 tons/yr VOC, based upon a rolling, 12-month summation.

Applicable compliance method:

VOC emissions shall be calculated and compliance determined by using the following equations:

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

where,

- A = hourly emission rate of 5.053 lb/hr, detailed in PTI application 14-05627, received October 4, 2004.
 B = the annual hours operated
 C = carbon filter control efficiency of 50% (0.50)

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

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

4. Emission Limitation:

0.13 lb/hr CO, 0.57 ton/yr CO

Applicable compliance method:

CO emissions shall be calculated and compliance determined by using the following equations:

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

where,

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

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

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

5. Emission Limitation:

0.16 lb/hr H₂S, 0.70 ton/yr H₂S

Applicable Compliance Method:

H₂S emissions shall be calculated and compliance determined by using the following equation:

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

where,

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

B = maximum annual hours operated

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

Method 15 of 40 CFR Part 60, Appendix A.

6. Compliance with term and condition B.2 shall be demonstrated by the record keeping in term and condition C.1.
7. Compliance with term and condition B.1 shall be demonstrated by the record keeping in term and condition C.1 and C.2.
8. Compliance with term and condition B.3 shall be demonstrated by the record keeping in term and condition C.4.

F. Miscellaneous Requirements

1. The terms and conditions listed in this permit to install shall supersede all the air pollution control requirements for this emissions unit contained in permit to install 14-05510 as issued on May 27, 2004.
2. The following terms and conditions of this permit are federally enforceable: A, B, C, D and E.
3. Air Toxic Policy Clarifying Language

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 result in an increase in emissions of any pollutant that has a listed TLV to above 1.0 ton per year may require the permittee to apply for and obtain a new permit to install.

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PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>
T010 - 35,000 gallon fixed roof storage tank with mist eliminator	OAC rule 3745-31-05(A)(3) OAC rule 3745-17-07(A) OAC rule 3745-17-11 OAC rule 3745-21-09(L)(2) 40 CFR Part 60, Subpart Kb OAC rule 3745-31-05(C)

OC T1

PTI A

Emissions Unit ID: T010

Issued: To be entered upon final issuance

Applicable Emissions
Limitations/Control Measures

Particulate emissions (PM) and particulate emissions less than 10 microns (PM-10) shall not exceed 0.14 pound per hour .

Volatile Organic Compound (VOC) emissions shall not exceed 5.05 pounds per hour.

Carbon Monoxide (CO) emissions shall not exceed 0.13 pound per hour and 0.57 ton per year.

Hydrogen Sulfide (H₂S) emissions shall not exceed 0.16 pound per hour and 0.70 ton per year.

The hourly and annual, except PM, PM10, and VOC, emission limitation(s) outlined are based upon the emissions unit's Potential to Emit (PTE). Therefore, no hourly and annual records are required to demonstrate compliance with these limits.

The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A) and OAC rule 3745-31-05(C).

Visible particulate emissions shall not exceed 20% opacity, as a six-minute average, except as

specified by rule.

The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05 (A)(3).

Exempt

Exempt pursuant

Particulate emissions (PM) and particulate emissions less than 10 microns (PM-10) shall not exceed 0.25 ton per year, based upon a rolling, 12-month summation.

Volatile Organic Compound (VOC) emissions shall not exceed 8.85 tons per year, based upon a rolling, 12-month summation.

See terms and conditions B.1.

2. Additional Terms and Conditions

- 2.a** Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by use of a mist eliminator with a 90% PM control efficiency, and compliance with the opacity limitation and the mass emission limitations.

B. Operational Restrictions

1. The lower explosive limit (LEL) shall not exceed 23 mg/liter while the emissions unit is in operation.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall monitor the lower explosive limit (LEL) in the vapor space of this emissions unit on a monthly basis. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall maintain monthly records of the following information:
 - a. the monthly LEL reading;
 - b. the annual average LEL reading;
 - c. the PM, PM10, and VOC emissions in tons;
 - d. the updated rolling, 12-month summation emissions total, in tons, for PM, PM10, and VOC (the total amount of emissions for the current month plus the total amount of emissions for the previous eleven calendar months).

D. Reporting Requirements

1. The permittee shall submit LEL quarterly deviation (excursion) reports that identify all periods of time during which the LEL value exceeded value specified in term and condition B.1.
2. The permittee shall submit quarterly deviation (excursion) reports that identify of all exceedances of the rolling, 12-month emission limitations for PM, PM10, and VOC.
3. The quarterly deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.
4. The permittee shall submit annual reports which specify the total VOC emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of

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each year, and shall cover the previous twelve month period (January through December).

E. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.1 of these terms and conditions shall be determined in accordance with the following method(s):

Emission Limitation:

20% opacity, as a six-minute average

Applicable compliance method:

Compliance shall be determined in accordance with Test Method 9, as set forth in "Appendix on Test Methods" in 40 CFR Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 2002, except as specified by rule.

2. Emission Limitation:

0.14 lb/hr PM/PM-10, 0.25 ton/yr PM/PM-10, based upon a rolling, 12-month summation

Applicable compliance method:

PM/PM-10 emissions shall be calculated and compliance determined by using the following equations:

$$\text{lbs PM/PM-10/hour} = (A) \times (1-C)$$

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

where,

A = hourly emission rate of 1.425 lb/hr, detailed in PTI application 14-05627, received October 4, 2004.

B = the annual hours operated

C = mist eliminator PM/PM-10 control efficiency of 90% (0.90)

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

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

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

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3. Emission Limitation:

5.05 lb/hr VOC, 8.85 tons/yr VOC, based upon a rolling, 12-month summation

Applicable compliance method:

VOC emissions shall be calculated and compliance determined by using the following equations:

$$\text{lbs VOC/hour} = (A)$$

$$\text{tons VOC/yr} = (A) \times (B) \times (1 \text{ ton}/2000 \text{ lbs})$$

where,

A = hourly emission rate of 5.053 lb/hr, detailed in PTI application 14-05627, received October 4, 2004.

B = the annual hours operated

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

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

4. Emission Limitation:

0.13 lb/hr CO, 0.57 ton/yr CO

Applicable compliance method:

CO emissions shall be calculated and compliance determined by using the following equations:

$$\text{lbs CO/hour} = (A)$$

$$\text{tons CO/yr} = (A) \times (B) \times (1 \text{ ton}/2000 \text{ lbs})$$

where,

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

B = maximum annual hours operated

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

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

5. Emission Limitation:

0.16 lb/hr H₂S, 0.70 ton/yr H₂S

Applicable Compliance Method:

H₂S emissions shall be calculated and compliance determined by using the following equation:

lbs H₂S/hour = (A)

tons H₂S/yr = (A) x (B) x (1 ton/2000 lbs)

where,

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

B = maximum annual hours operated

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

Method 15 of 40 CFR Part 60, Appendix A.

6. Compliance with term and condition B.1 shall be demonstrated by the record keeping in term and condition C.1.

F. Miscellaneous Requirements

1. The terms and conditions listed in this permit to install shall supersede all the air pollution control requirements for this emissions unit contained in permit to install 14-05510 as issued on May 27, 2004.
2. The following terms and conditions of this permit are federally enforceable: A, C, D and E.
3. Air Toxic Policy Clarifying Language

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 result in an increase in emissions of any pollutant that has a listed TLV to above 1.0 ton per year may require the permittee to apply for and obtain a new permit to install.

OC T1

PTI A

Emissions Unit ID: T012

Issued: To be entered upon final issuance**PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)****A. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>
T012 - 35,000 gallon fixed roof storage tank with mist eliminator	OAC rule 3745-31-05(A)(3) OAC rule 3745-17-07(A) OAC rule 3745-17-11 OAC rule 3745-21-09(L)(2) 40 CFR Part 60, Subpart Kb OAC rule 3745-31-05(C)

OC T1

PTI A

Emissions Unit ID: T012

Issued: To be entered upon final issuance

<u>Applicable Emissions Limitations/Control Measures</u>	
Particulate emissions (PM) and particulate emissions less than 10 microns (PM-10) shall not exceed 0.14 pound per hour.	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05 (A)(3).
Volatile Organic Compound (VOC) emissions shall not exceed 5.05 pounds per hour.	Exempt Exempt
Carbon Monoxide (CO) emissions shall not exceed 0.13 pound per hour and 0.57 ton per year.	Particulate emissions (PM) and particulate emissions less than 10 microns (PM-10) shall not exceed 0.25 ton per year, based upon a rolling, 12-month summation.
Hydrogen Sulfide (H ₂ S) emissions shall not exceed 0.16 pound per hour and 0.70 ton per year.	Volatile Organic Compound (VOC) emissions shall not exceed 8.85 tons per year, based upon a rolling, 12-month summation.
The hourly and annual, except for PM, PM10, and VOC, emission limitation(s) outlined are based upon the emissions unit's Potential to Emit (PTE). Therefore, no hourly and annual records are required to demonstrate compliance with these limits.	See terms and conditions B.1.
The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A) and OAC rule 3745-31-05(C).	
Visible particulate emissions shall not exceed 20% opacity, as a six-minute average, except as specified by rule.	

2. Additional Terms and Conditions

- 2.a** Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by use of a mist eliminator with a 90% PM control efficiency, and compliance with the opacity limitation and the mass emission limitations.

B. Operational Restrictions

1. The lower explosive limit (LEL) shall not exceed 23 mg/liter while the emissions unit is in operation.

OC T1

PTI A

Emissions Unit ID: T012

Issued: To be entered upon final issuance**C. Monitoring and/or Recordkeeping Requirements**

1. The permittee shall monitor the lower explosive limit (LEL) in the vapor space of this emissions unit on a monthly basis. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall maintain monthly records of the following information:
 - a. the monthly LEL reading;
 - b. the annual average LEL reading;
 - c. the PM, PM10, and VOC emissions in tons;
 - d. the updated rolling, 12-month summation emissions total, in tons, for PM, PM10, and VOC (the total amount of emissions for the current month plus the total amount of emissions for the previous eleven calendar months).

D. Reporting Requirements

1. The permittee shall submit LEL quarterly deviation (excursion) reports that identify all periods of time during which the LEL value exceeded the value specified in term and condition B.1.
2. The permittee shall submit quarterly deviation (excursion) reports that identify of all exceedances of the rolling, 12-month emission limitations for PM, PM10, and VOC.
3. The quarterly deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.
4. The permittee shall submit annual reports which specify the total VOC emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year, and shall cover the previous twelve month period (January through December).

E. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.1 of these terms and conditions shall be determined in accordance with the following method(s):

Emission Limitation:

20% opacity, as a six-minute average

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Applicable compliance method:

Compliance shall be determined in accordance with Test Method 9, as set forth in "Appendix on Test Methods" in 40 CFR Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 2002, except as specified by rule.

2. Emission Limitation:

0.14 lb/hr PM/PM-10, 0.25 ton/yr PM/PM-10, based upon a rolling, 12-month summation

Applicable compliance method:

PM/PM-10 emissions shall be calculated and compliance determined by using the following equations:

$$\text{lbs PM/PM-10/hour} = (A) \times (1-C)$$

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

where,

A = hourly emission rate of 1.425 lb/hr, detailed in PTI application 14-05627, received October 4, 2004.

B = the annual hours operated

C = mist eliminator PM/PM-10 control efficiency of 90% (0.90)

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

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

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

3. Emission Limitation:

5.05 lb/hr VOC, 8.85 tons/yr VOC, based upon a rolling, 12-month summation

Applicable compliance method:

VOC emissions shall be calculated and compliance determined by using the following equations:

$$\text{lbs VOC/hour} = (A)$$

$$\text{tons VOC/yr} = (A) \times (B) \times (1 \text{ ton}/2000 \text{ lbs})$$

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where,

A = hourly emission rate of 5.053 lb/hr, detailed in PTI application 14-05627, received October 4, 2004.

B = the annual hours operated.

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

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

4. Emission Limitation:

0.13 lb/hr CO, 0.57 ton/yr CO

Applicable compliance method:

CO emissions shall be calculated and compliance determined by using the following equations:

$$\text{lbs CO/hour} = (A)$$

$$\text{tons CO/yr} = (A) \times (B) \times (1 \text{ ton}/2000 \text{ lbs})$$

where,

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

B = maximum annual hours operated

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

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

5. Emission Limitation:

0.16 lb/hr H₂S, 0.70 ton/yr H₂S

Applicable Compliance Method:

H₂S emissions shall be calculated and compliance determined by using the following equation:

$$\text{lbs H}_2\text{S/hour} = (A)$$

$$\text{tons H}_2\text{S/yr} = (A) \times (B) \times (1 \text{ ton}/2000 \text{ lbs})$$

OC Trumbull Asphalt
PTI Application: 14-05627
Issued

Facility ID: 1431302438

Emissions Unit ID: T012

where,

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

B = maximum annual hours operated

Issued: To be entered upon final issuance

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

Method 15 of 40 CFR Part 60, Appendix A.

6. Compliance with term and condition B.1 shall be demonstrated by the record keeping in term and condition C.1.

F. Miscellaneous Requirements

1. The terms and conditions listed in this permit to install shall supersede all the air pollution control requirements for this emissions unit contained in permit to install 14-05510 as issued on May 27, 2004.
2. The following terms and conditions of this permit are federally enforceable: A, C, D and E.
3. Air Toxic Policy Clarifying Language

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 result in an increase in emissions of any pollutant that has a listed TLV to above 1.0 ton per year may require the permittee to apply for and obtain a new permit to install.

Issued: To be entered upon final issuance

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>
T015 - 50,000 gallon fixed roof storage tank with mist eliminator	OAC rule 3745-31-05(A)(3) OAC rule 3745-17-07(A) OAC rule 3745-17-11 OAC rule 3745-21-09(L) 40 CFR Part 60, Subpart Ka OAC rule 3745-31-05(C)

OC T1

PTI A

Emissions Unit ID: T015

Issued: To be entered upon final issuance

Applicable Emissions <u>Limitations/Control Measures</u>	six-minute average, except as specified by rule.
Particulate emissions (PM) and particulate emissions less than 10 microns (PM-10) shall not exceed 0.14 pound per hour.	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05 (A)(3).
Volatile Organic Compound (VOC) emissions shall not exceed 5.05 pounds per hour.	See terms and conditions C.1 and D.1.
Carbon Monoxide (CO) emissions shall not exceed 0.13 pound per hour and 0.57 ton per year.	Exempt pursuant to 40 CFR 60.115a(d)(1).
Hydrogen Sulfide (H ₂ S) emissions shall not exceed 0.16 pound per hour and 0.70 ton per year.	Particulate emissions (PM) and particulate emissions less than 10 microns (PM-10) shall not exceed 0.25 ton per year, based upon a rolling, 12-month summation.
The hourly and annual, except for PM, PM10, and VOC, emission limitation(s) outlined are based upon the emissions unit's Potential to Emit (PTE). Therefore, no hourly and annual records are required to demonstrate compliance with these limits.	Volatile Organic Compound (VOC) emissions shall not exceed 8.85 tons per year, based upon a rolling, 12-month summation.
The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A), OAC rule 3745-21-09(L), and OAC rule 3745-31-05(C).	See terms and conditions B.1.
Visible particulate emissions shall not exceed 20% opacity, as a	

2. Additional Terms and Conditions

- 2.a** Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by use of a mist eliminator with a 90% PM control efficiency, and compliance with the opacity limitation and the mass emission limitations.

B. Operational Restrictions

1. The lower explosive limit (LEL) shall not exceed 23 mg/liter while the emissions unit is in operation.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain records of the following:
- 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.
2. The permittee shall monitor the lower explosive limit (LEL) in the vapor space of this emissions unit on a monthly basis. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall maintain monthly records of the following information:
- a. the monthly LEL reading;
 - b. the annual average LEL reading;
 - c. the PM, PM10, and VOC emissions in tons;
 - d. the updated rolling, 12-month summation emissions total, in tons, for PM, PM10, and VOC (the total amount of emissions for the current month plus the total amount of emissions for the previous eleven calendar months).

D. Reporting Requirements

1. 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 Hamilton County Department of Environmental Services) and shall comply with all applicable

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sections of 40 CFR, Part 60, Subpart Ka within 30 days of becoming aware of the occurrence.

2. If the permittee places, stores, or holds any petroleum liquid with a true vapor pressure which is greater than 1.5 pound per square inch absolute, the permittee shall so notify the Director (the Hamilton County Department of Environmental Services) and shall comply with, but not limited to, all applicable sections of both OAC rule 3745-21-09(L) and 40 CFR, Part 60, Subpart Ka within 30 days of becoming aware of the occurrence.
3. The permittee shall submit LEL quarterly deviation (excursion) reports that identify all periods of time during which the LEL value exceeded the value specified in term and condition B.1.
4. The permittee shall submit quarterly deviation (excursion) reports that identify of all exceedances of the rolling, 12-month emission limitations for PM, PM10, and VOC.
6. The quarterly deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.
7. The permittee shall submit annual reports which specify the total VOC emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year, and shall cover the previous twelve month period (January through December).

E. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.1 of these terms and conditions shall be determined in accordance with the following method(s):

Emission Limitation:

20% opacity, as a six-minute average

Applicable compliance method:

Compliance shall be determined in accordance with Test Method 9, as set forth in "Appendix on Test Methods" in 40 CFR Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 2002, except as specified by rule.

2. Emission Limitation:

0.14 lb/hr PM/PM-10, 0.25 ton/yr PM/PM-10, based upon a rolling, 12-month summation.

Applicable compliance method:

PM/PM-10 emissions shall be calculated and compliance determined by using the following equations:

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

where,

- A = hourly emission rate of 1.425 lb/hr, detailed in PTI application 14-05627, received October 4, 2004.
- B = the annual hours operated
- C = mist eliminator PM/PM-10 control efficiency of 90% (0.90).

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

For PM, Method 5A of 40 CFR Part 60, Appendix A.
 For PM-10, Method 201 of 40 CFR Part 51, Appendix M.

3. Emission Limitation:

5.05 lb/hr VOC, 8.85 tons/yr VOC, based upon a rolling, 12-month summation.

Applicable compliance method:

VOC emissions shall be calculated and compliance determined by using the following equations:

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

where,

- A = hourly emission rate of 5.053 lb/hr, detailed in PTI application 14-05627, received October 4, 2004.
- B = the annual hours operated.

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

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

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4. Emission Limitation:

0.13 lb/hr CO, 0.57 ton/yr CO

Applicable compliance method:

CO emissions shall be calculated and compliance determined by using the following equations:

$$\text{lbs CO/hour} = (A)$$

$$\text{tons CO/yr} = (A) \times (B) \times (1 \text{ ton}/2000 \text{ lbs})$$

where,

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

B = maximum annual hours operated

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

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

5. Emission Limitation:

0.16 lb/hr H₂S, 0.70 ton/yr H₂S

Applicable Compliance Method:

H₂S emissions shall be calculated and compliance determined by using the following equation:

$$\text{lbs H}_2\text{S/hour} = (A)$$

$$\text{tons H}_2\text{S/yr} = (A) \times (B) \times (1 \text{ ton}/2000 \text{ lbs})$$

where,

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

B = maximum annual hours operated

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

Method 15 of 40 CFR Part 60, Appendix A.

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6. Compliance with term and condition B.1 shall be demonstrated by the record keeping in term and condition C.1.

E. Miscellaneous Requirements

1. The terms and conditions listed in this permit to install shall supersede all the air pollution control requirements for this emissions unit contained in permit to install 14-05510 as issued on May 27, 2004.
2. The following terms and conditions of this permit are federally enforceable: A, B, C, D and E.
3. Air Toxic Policy Clarifying Language

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 result in an increase in emissions of any pollutant that has a listed TLV to above 1.0 ton per year may require the permittee to apply for and obtain a new permit to install.

Issued: To be entered upon final issuance

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>
T016 - 100,000 gallon fixed roof storage tank with mist eliminator	<p>OAC rule 3745-31-05(A)(3)</p> <p>OAC rule 3745-17-07(A)</p> <p>OAC rule 3745-17-11</p> <p>OAC rule 3745-21-09(L)</p> <p>40 CFR Part 60, Subpart Ka</p> <p>OAC rule 3745-31-05(C)</p>

OC T₁

PTI A

Emissions Unit ID: T016

Issued: To be entered upon final issuance

Applicable Emissions <u>Limitations/Control Measures</u>	six-minute average, except as specified by rule.
Particulate emissions (PM) and particulate emissions less than 10 microns (PM-10) shall not exceed 0.14 pound per hour.	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05 (A)(3).
Volatile Organic Compound (VOC) emissions shall not exceed 5.05 pounds per hour.	See terms and conditions C.1 and D.1.
Carbon Monoxide (CO) emissions shall not exceed 0.13 pound per hour and 0.57 ton per year.	Exempt pursuant to 40 CFR 60.115a(d)(1).
Hydrogen Sulfide (H ₂ S) emissions shall not exceed 0.16 pound per hour and 0.70 ton per year.	Particulate emissions (PM) and particulate emissions less than 10 microns (PM-10) shall not exceed 0.25 ton per year, based upon a rolling, 12-month summation.
The hourly and annual, except for PM, PM10, and VOC, emission limitation(s) outlined are based upon the emissions unit's Potential to Emit (PTE). Therefore, no hourly and annual records are required to demonstrate compliance with these limits.	Volatile Organic Compound (VOC) emissions shall not exceed 8.85 tons per year, based upon a rolling, 12-month summation.
The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A), OAC rule 3745-21-09(L), and OAC rule 3845-31-05(C).	See terms and conditions B.1.
Visible particulate emissions shall not exceed 20% opacity, as a	

2. Additional Terms and Conditions

- 2.a** Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by use of a mist eliminator with a 90% PM control efficiency, and compliance with the opacity limitation and the mass emission limitations.

B. Operational Restrictions

1. The lower explosive limit (LEL) shall not exceed 23 mg/liter while the emissions unit is in operation.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain records of the following:
- 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.
2. The permittee shall monitor the lower explosive limit (LEL) in the vapor space of this emissions unit on a monthly basis. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall maintain monthly records of the following information:
- a. the monthly LEL reading;
 - b. the annual average LEL reading;
 - c. the PM, PM10, and VOC emissions in tons;
 - d. the updated rolling, 12-month summation emissions total, in tons, for PM, PM10, and VOC (the total amount of emissions for the current month plus the total amount of emissions for the previous eleven calendar months).

D. Reporting Requirements

1. 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 Hamilton County Department of Environmental Services) and shall comply with all applicable

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- sections of 40 CFR, Part 60, Subpart Ka within 30 days of becoming aware of the occurrence.
2. If the permittee places, stores, or holds any petroleum liquid with a true vapor pressure which is greater than 1.5 pound per square inch absolute, the permittee shall so notify the Director (the Hamilton County Department of Environmental Services) and shall comply with, but not limited to, all applicable sections of both OAC rule 3745-21-09(L) and 40 CFR, Part 60, Subpart Ka within 30 days of becoming aware of the occurrence.
 3. The permittee shall submit LEL quarterly deviation (excursion) reports that identify all periods of time during which the LEL value exceeded the value specified in term and condition B.1.
 4. The permittee shall submit quarterly deviation (excursion) reports that identify of all exceedances of the rolling, 12-month emission limitations for PM, PM10, and VOC.
 6. The quarterly deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.
 7. The permittee shall submit annual reports which specify the total VOC emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year, and shall cover the previous twelve month period (January through December).

E. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.1 of these terms and conditions shall be determined in accordance with the following method(s):

Emission Limitation:

20% opacity, as a six-minute average

Applicable compliance method:

Compliance shall be determined in accordance with Test Method 9, as set forth in "Appendix on Test Methods" in 40 CFR Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 2002, except as specified by rule.

2. Emission Limitation:

0.14 lb/hr PM/PM-10, 0.25 ton/yr PM/PM-10, based upon a rolling, 12-month summation.

Applicable compliance method:

PM/PM-10 emissions shall be calculated and compliance determined by using the following equations:

$$\text{lbs PM/PM-10/hour} = (A) \times (1-C)$$

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

where,

A = hourly emission rate of 1.425 lb/hr, detailed in PTI application 14-05627, received October 4, 2004.

B = the annual hours operated

C = mist eliminator PM/PM-10 control efficiency of 90% (0.90)

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

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

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

3. Emission Limitation:

5.05 lb/hr VOC, 8.85 tons/yr VOC, based upon a rolling, 12-month summation.

Applicable compliance method:

VOC emissions shall be calculated and compliance determined by using the following equations:

$$\text{lbs VOC/hour} = (A)$$

$$\text{tons VOC/yr} = (A) \times (B) \times (1 \text{ ton}/2000 \text{ lbs})$$

where,

A = hourly emission rate of 5.053 lb/hr, detailed in PTI application 14-05627, received October 4, 2004.

B = the annual hours operated

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

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

4. Emission Limitation:

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0.13 lb/hr CO, 0.57 ton/yr CO

Applicable compliance method:

CO emissions shall be calculated and compliance determined by using the following equations:

lbs CO/hour = (A)

tons CO/yr = (A) x (B) x (1 ton/2000 lbs)

where,

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

B = maximum annual hours operated

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

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

5. Emission Limitation:

0.16 lb/hr H₂S, 0.70 ton/yr H₂S

Applicable Compliance Method:

H₂S emissions shall be calculated and compliance determined by using the following equation:

lbs H₂S/hour = (A)

tons H₂S/yr = (A) x (B) x (1 ton/2000 lbs)

where,

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

B = maximum annual hours operated

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

Method 15 of 40 CFR Part 60, Appendix A.

Issued: To be entered upon final issuance

6. Compliance with term and condition B.1 shall be demonstrated by the record keeping in term and condition C.1.

E. Miscellaneous Requirements

1. The terms and conditions listed in this permit to install shall supersede all the air pollution control requirements for this emissions unit contained in permit to install 14-05510 as issued on May 27, 2004.
2. The following terms and conditions of this permit are federally enforceable: A, B, C, D and E.
3. Air Toxic Policy Clarifying Language

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 result in an increase in emissions of any pollutant that has a listed TLV to above 1.0 ton per year may require the permittee to apply for and obtain a new permit to install.