



State of Ohio Environmental Protection Agency

Street Address:

Lazarus Gov. Center  
122 S. Front Street  
Columbus, OH 43215

TELE: (614) 644-3020 FAX: (614) 644-2329

Mailing Address:

Lazarus Gov. Center  
P.O. Box 1049  
Columbus, OH 43216-1049

**RE: DRAFT PERMIT TO INSTALL  
MEDINA COUNTY  
Application No: 16-1952**

**CERTIFIED MAIL**

	TOXIC REVIEW
	PSD
	SYNTHETIC MINOR
	CEMS
	MACT
X	NSPS
	NESHAPS
	NETTING
	MAJOR NON-ATTAINMENT
	MODELING SUBMITTED
	GASOLINE DISPENSING FACILITY

**DATE:** July 21, 1999

Owens Corning - Medina Roofing & Asphalt  
Brian Thomas  
890 West Smith Road  
Medina, OH 44256

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 **\$300** 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.

Very truly yours,

Thomas G. Rigo, Manager  
Field Operations and Permit Section  
Division of Air Pollution Control

cc: USEPA  
AKRON REGIONAL AIR QUALITY MANAGEMENT



STATE OF OHIO ENVIRONMENTAL PROTECTION AGENCY

**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 16-1952**

Application Number: 16-1952

APS Premise Number: 1652050040

Permit Fee: **To be entered upon final issuance**

Name of Facility: Owens Corning - Medina Roofing & Asphalt

Person to Contact: Brian Thomas

Address: 890 West Smith Road  
Medina, OH 44256

Location of proposed air contaminant source(s) [emissions unit(s)]:

**890 West Smith Road  
Medina, Ohio**

Description of proposed emissions unit(s):

**TWO 29600 GAL ASPHALT STORAGE TANKS.**

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

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Director

## Part I - GENERAL TERMS AND CONDITIONS

### A. State and Federally Enforceable Permit To Install General Terms and Conditions

#### 1. Monitoring and Related Recordkeeping and Reporting Requirements

- a. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
  - i. The date, place (as defined in the permit), and time of sampling or measurements.
  - ii. The date(s) analyses were performed.
  - iii. The company or entity that performed the analyses.
  - iv. The analytical techniques or methods used.
  - v. The results of such analyses.
  - vi. The operating conditions existing at the time of sampling or measurement.
- b. 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.
- c. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:
  - i. Reports of any required monitoring and/or recordkeeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
  - ii. Quarterly written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be promptly made to the appropriate Ohio EPA District Office or local air agency. These quarterly written reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(i) and (ii) pertaining to the submission of monitoring reports every six months and OAC rule 3745-77-07(A)(3)(c)(iii) pertaining to the prompt reporting of all deviations except malfunctions, which shall be reported in accordance with

OAC rule 3745-15-06. The written 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.) See B.14 below if no deviations occurred during the quarter.

- iii. Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements contained in this permit shall be submitted to the appropriate Ohio EPA District Office or local air agency every six months, i.e., by January 31 and July 31 of each year for the previous six calendar months. These semi-annual written reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(i) and (ii) pertaining to the reporting of any deviations related to the monitoring, recordkeeping, and reporting requirements. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.
- iv. Each written report shall be signed by a responsible official certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.

## 2. 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, i.e., upset, 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. (The definition of an upset condition shall be the same as that used in OAC rule 3745-15-06(B)(1) for a malfunction.) The verbal and written reports submitted pursuant to OAC rule 3745-15-06 shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(iii) pertaining to the prompt reporting of deviations caused by malfunctions or upsets.

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 emission unit(s) that is (are) served by such control system(s).

## 3. Risk Management Plans

If the permittee is required to develop and register a risk management plan pursuant to section 112(r) of the Clean Air Act, as amended, 42 U.S.C. 7401 et seq. ("Act"), the permittee shall comply with the requirement to register such a plan.

**4. Title IV Provisions**

If the permittee is subject to the requirements of 40 CFR Part 72 concerning acid rain, the permittee shall ensure that any affected emissions unit complies with those requirements. Emissions exceeding any allowances that are lawfully held under Title IV of the Act, or any regulations adopted thereunder, are prohibited.

**5. Severability Clause**

A determination that any term or condition of this permit is invalid shall not invalidate the force or effect of any other term or condition thereof, except to the extent that any other term or condition depends in whole or in part for its operation or implementation upon the term or condition declared invalid.

**6. General Requirements**

- a. The permittee must comply with all terms and conditions of this permit. Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and reissuance, or modification, or for denial of a permit renewal application.
- b. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.
- c. This permit may be modified, reopened, revoked, or revoked and reissued, for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.
- d. This permit does not convey any property rights of any sort, or any exclusive privilege.
- e. 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 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 request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

**7. 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.

**8. Federal and State Enforceability**

Only those terms and conditions designated in this permit as federally enforceable, that are required under the Act, or any of its applicable requirements, including relevant provisions designed to limit the potential to emit of a source, are enforceable by the Administrator of the U.S. EPA, the State, and citizens under the Act. All other terms and conditions of this permit shall not be federally enforceable and shall be enforceable under State law only.

**9. Compliance Requirements**

- a. Any document (including reports) required to be submitted and required by a federally applicable requirement in this permit shall include a certification by a responsible official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.
- b. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:
  - i. At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.
  - ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with paragraph (E) of OAC rule 3745-77-03.
  - iii. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
  - iv. As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.
- c. The permittee shall submit progress reports to the appropriate Ohio EPA District Office or local air agency concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually, or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:

- i. Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
      - ii. An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.
  - d. Compliance certifications concerning the terms and conditions contained in this permit that are federally enforceable emission limitations, standards, or work practices, shall be submitted to the appropriate Ohio EPA District Office or local air agency in the following manner and with the following content:
    - i. Compliance certifications shall be submitted on an annual basis unless the applicable requirement specifies more frequent submissions.
    - ii. Compliance certifications shall include the following:
      - (a) An identification of each term or condition of this permit that is the basis of the certification.
      - (b) The permittee's current compliance status.
      - (c) Whether compliance was continuous or intermittent.
      - (d) The method(s) used for determining the compliance status of the source currently and over the required reporting period.
      - (e) Such other facts as the Director of the Ohio EPA may require in the permit to determine the compliance status of the source.
    - iii. Compliance certifications shall contain such additional requirements as may be specified pursuant to sections 114(a)(3) and 504(b) of the Act.

## 10. Emergencies

The permittee shall have an affirmative defense of emergency to an action brought for noncompliance with technology-based emission limitations if the conditions of OAC rule 3745-77-07(G)(3) are met. This emergency defense provision is in addition to any emergency or upset provision contained in any applicable requirement.

**11. Title V Permit To Operate Application**

Pursuant to OAC Chapter 3745-77, the permittee shall submit a complete Title V permit application or a complete Title V permit modification application within twelve (12) months after commencing operation of the emissions units covered by this permit.

**B. State Only Enforceable 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 Related to Monitoring and Recordkeeping 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 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 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 are inadequate 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 prove to be inadequate 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 application must be made to the Director for the installation or modification of any other emissions unit(s).

**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. 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.

**14. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations (See Section A of This Permit)**

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.

**C. 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>
VOC	1.20
PM	0.34
CO	0.98
H2S	0.17
S0 <sub>2</sub>	5.30

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**Part II - FACILITY SPECIFIC TERMS AND CONDITIONS**

**A. State and Federally Enforceable Permit To Install Facility Specific Terms and Conditions**

None.

**B. State Only Enforceable Permit To Install Facility Specific Terms and Conditions**

None.

**Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**

**A. State and Federally Enforceable Section**

**I. 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>	<u>Applicable Emissions Limitations/Control Measures</u>
29,600-gallon oxidized asphalt storage tank - tank #59 controlled with a thermal incinerator	OAC rule 3745-21-09(L)	exempt (see A.I.2.a below)
	40 CFR Part 60, Subpart UU	See section A.I.2.b below.
	40 CFR Part 60, Subpart Kb	See section A.III.2 below.

2. **Additional Terms and Conditions**

- 2.a In accordance with OAC rule 3745-21-09(L)(2), this storage tank is exempt from the requirements of OAC rule 3745-21-09(L)(1) because the tank has a capacity of less than 40,000 gallons.
- 2.b Visible emissions to the atmosphere shall not exceed 0% opacity, except for one consecutive 15-minute period in any 24-hour period when the transfer lines are being blown for cleaning. The control device shall not be bypassed during this 15-minute period.

**II. Operational Restrictions**

1. The average combustion temperature within the thermal incinerator, for any 3-hour block of time when the emissions unit is in operation, shall not be less than 1450 degrees Fahrenheit or more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.

**III. Monitoring and/or Recordkeeping Requirements**

1. The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the thermal incinerator when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer’s recommendations, with any modifications deemed necessary by the permittee. The permittee shall collect and record the following information for each day:

- a. All 3-hour blocks of time during which the average combustion temperature within the thermal incinerator, when the emissions unit was in operation, was less than 1450 degrees Fahrenheit or more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.
  - b. A log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.
2. The permittee shall maintain a record showing the dimension of this vessel and an analysis showing the capacity. This record shall be kept for the life of the emissions unit.

#### **IV. Reporting Requirements**

1. The permittee shall submit deviation (excursion) reports which identify all 3-hour blocks of time during which the average combustion temperature within the thermal incinerator does not comply with the temperature limitation specified above.
2. The deviation reports shall be submitted in accordance with the requirements specified in the General Terms and Conditions of this permit.

#### **V. Testing Requirements**

1. Compliance with the emission limitation in section A.I.1 of these terms and conditions shall be determined in accordance with the following method:
  - a. Emission Limitation:  
  
0% opacity  
  
Applicable Compliance Method:  
  
OAC rule 3745-17-03(B)(1)

#### **VI. Miscellaneous Requirements**

None.

**B. State Only Enforceable Section**

**I. 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>	<u>Applicable Emissions Limitations/Control Measures</u>
29,600-gallon oxidized asphalt storage tank - tank #59 controlled with a thermal incinerator	OAC rule 3745-31-05	0.60 tpy volatile organic compounds (VOC)  0.17 tpy particulates  0.49 tpy carbon monoxide (CO)  0.07 tpy hydrogen sulfide (H <sub>2</sub> S)  2.65 tpy sulfur dioxide (SO <sub>2</sub> )

2. **Additional Terms and Conditions**

- 2.a The fixed roof storage tank shall be equipped with a submerged filling pipe and shall vent to a fume incinerator to control asphalt fumes.
- 2.b The tpy emission limitations specified in section B.I.1 were established for PTI purposed to reflect the potential to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and reporting requirements to ensure compliance with these limitations.

**II. Operational Restrictions**

None.

**III. Monitoring and/or Record keeping Requirements**

None.

**IV. Reporting Requirements**

None.

**V. Testing Requirements**

2. Compliance with the emission limitations in section B.I.1 of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

0.60 tpy VOC

Applicable Compliance Method:

VOC emissions(lb/yr) = VOC Concentration(lb/cf) \* Flow \* (60 min/hr) \* (8760 hr/yr)

Where:

VOC Conc.(lb/cf) = %LEL \* (1 - fraction methane/ethane) \* (100%LEL conc) \* (28.32 L/cf) \* (lb/454,000mg)

%LEL = Lower Explosive Limit value for the tank = 0.56, as determined from testing;

fraction methane/ethane = 0.52, as determined from testing;

100% LEL conc. = 45mg/L, value of the Lower Explosion Limit (100% LEL) expressed in a concentration that is constant for alkanes, Industrial Explosion and Protection, Frank T. Bodurtha, p12, McGraw Hill, 1980; and

Flow = vent flow, (cfm) = 60 cfm.

Controlled VOC emissions (tpy) = VOC emissions(lb/yr) \* (1 - control efficiency) \*(capture efficiency) \* (ton/2,000lbs)

Where:

Control efficiency = 95%, as determined from most recent stack test; and

Capture efficiency = 100%, assumed since closed loop system vented to control device.

b. Emission Limitation:

0.17 tpy particulates

Applicable Compliance Method:

Controlled particulate emissions (tpy) = Controlled VOC emissions (tpy) \* (0.28)

From testing, it has been determined that 28% of VOC emissions are considered particulate emissions.

If required, compliance with this mass emission limitation shall be based on stack testing in accordance with Method 5 of 40 CFR Part 60, Appendix A.

c. Emission Limitation:

0.49 tpy CO

Applicable Compliance Method:

$$\text{Uncontrolled CO(lb/yr)} = \text{EF} * \text{C} * (0.028\text{m}^3/\text{cf}) * (\text{lb}/454,000\text{mg}) * \text{Flow} * (60\text{min}/\text{hr}) * (8760 \text{ hr}/\text{yr})$$

Where:

EF = 1.14 mg/m<sup>3</sup>/ppm emission factor from AP-42 for CO;  
C = pollutant concentration (ppm) from correlation of the concentration of CO based on the LEL of asphalt = 12.43 \* %LEL + 800 for oxidized asphalt = 8752 ppm; and  
Flow = vent flow, (cfm) = 60 cfm.

$$\text{Controlled CO emissions (tpy)} = \text{CO emissions(lb/yr)} * (1 - \text{control efficiency}) * (\text{capture efficiency}) * (\text{ton}/2,000\text{lbs})$$

Where:

Control efficiency = 95%, as determined from most recent stack test;  
and  
Capture efficiency = 100%, assumed since closed loop system vented to control device.

d. Emission Limitation:

0.07 tpy H<sub>2</sub>S

Applicable Compliance Method:

$$\text{Uncontrolled H}_2\text{S(lb/yr)} = \text{EF} * \text{C} * (0.028\text{m}^3/\text{cf}) * (\text{lb}/454,000\text{mg}) * \text{Flow} * (60\text{min}/\text{hr}) * (8760 \text{ hr}/\text{yr})$$

Where:

EF = 1.39 mg/m<sup>3</sup>/ppm emission factor from AP-42 for H<sub>2</sub>S;  
C = pollutant concentration (ppm) from correlation of the concentration of H<sub>2</sub>S based on the LEL of asphalt = 12.43 \* %LEL + 400.5 for oxidized asphalt = 1096.58 ppm; and  
Flow = vent flow, (cfm) = 60 cfm.

Controlled H<sub>2</sub>S emissions (tpy) = H<sub>2</sub>S emissions(lb/yr) \* (1 - control efficiency) \*(capture efficiency) \* (ton/2,000lbs)

Where:

Control efficiency = 95%, as determined from most recent stack test;

and

Capture efficiency = 100%, assumed since closed loop system vented to control device.

e. Emission Limitation:

2.65 tpy SO<sub>2</sub>

Applicable Compliance Method:

SO<sub>2</sub> emissions (tpy) = [Uncontrolled H<sub>2</sub>S emissions (tpy) -  
Controlled H<sub>2</sub>S emissions (tpy)] \* 1.88

## VI. Miscellaneous Requirements

None.

**PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S) [Continued]**

**A. State and Federally Enforceable Section**

**I. 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>	<u>Applicable Emissions Limitations/Control Measures</u>
29,600-gallon oxidized asphalt storage tank - tank #67 controlled with a thermal incinerator	OAC rule 3745-21-09(L)  40 CFR Part 60, Subpart UU  40 CFR Part 60, Subpart Kb	exempt (see A.I.2.a below)  See section A.I.2.b below.  See section A.III.2 below.

2. **Additional Terms and Conditions**

- 2.a In accordance with OAC rule 3745-21-09(L)(2), this storage tank is exempt from the requirements of OAC rule 3745-21-09(L)(1) because the tank has a capacity of less than 40,000 gallons.
- 2.b Visible emissions to the atmosphere shall not exceed 0% opacity, except for one consecutive 15-minute period in any 24-hour period when the transfer lines are being blown for cleaning. The control device shall not be bypassed during this 15-minute period.

**II. Operational Restrictions**

1. The average combustion temperature within the thermal incinerator, for any 3-hour block of time when the emissions unit is in operation, shall not be less than 1450 degrees Fahrenheit or more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.

**III. Monitoring and/or Recordkeeping Requirements**

1. The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the thermal incinerator when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer’s recommendations, with any modifications deemed necessary by the permittee.

The permittee shall collect and record the following information for each day:

- a. All 3-hour blocks of time during which the average combustion temperature within the thermal incinerator, when the emissions unit was in operation, was less than 1450 degrees Fahrenheit or more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.
  - b. A log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.
2. The permittee shall maintain a record showing the dimension of this vessel and an analysis showing the capacity. This record shall be kept for the life of the emissions unit.

#### **IV. Reporting Requirements**

1. The permittee shall submit deviation (excursion) reports which identify all 3-hour blocks of time during which the average combustion temperature within the thermal incinerator does not comply with the temperature limitation specified above.
2. The deviation reports shall be submitted in accordance with the requirements specified in the General Terms and Conditions of this permit.

#### **V. Testing Requirements**

1. Compliance with the emission limitation in section A.I.1 of these terms and conditions shall be determined in accordance with the following method:
  - a. Emission Limitation:  
  
0% opacity  
  
Applicable Compliance Method:  
  
OAC rule 3745-17-03(B)(1)

#### **VI. Miscellaneous Requirements**

None.

**B. State Only Enforceable Section**

**I. 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>	<u>Applicable Emissions Limitations/Control Measures</u>
29,600-gallon oxidized asphalt storage tank - tank #67 controlled with a thermal incinerator	OAC rule 3745-31-05	0.60 tpy volatile organic compounds (VOC)  0.17 tpy particulates  0.49 tpy carbon monoxide (CO)  0.07 tpy hydrogen sulfide (H <sub>2</sub> S)  2.65 tpy sulfur dioxide (SO <sub>2</sub> )

**2. Additional Terms and Conditions**

- 2.a The fixed roof storage tank shall be equipped with a submerged filling pipe and shall vent to a fume incinerator to control asphalt fumes.
- 2.b The tpy emission limitations specified in section B.I.1 were established for PTI purposed to reflect the potential to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and reporting requirements to ensure compliance with these limitations.

**II. Operational Restrictions**

None.

**III. Monitoring and/or Record keeping Requirements**

None.

**IV. Reporting Requirements**

None.

**V. Testing Requirements**

1. Compliance with the emission limitations in section B.I.1 of these terms and conditions shall be determined in accordance with the following methods:

- a. Emission Limitation:

0.60 tpy VOC

Applicable Compliance Method:

$$\text{VOC emissions(lb/yr)} = \text{VOC Concentration(lb/cf)} * \text{Flow} * (60 \text{ min/hr}) * (8760 \text{ hr/yr})$$

Where:

$$\text{VOC Conc. (lb/cf)} = \% \text{LEL} * (1 - \text{fraction methane/ethane}) * (100\% \text{LEL conc}) * (28.32 \text{ L/cf}) * (\text{lb}/454,000\text{mg})$$

%LEL = Lower Explosive Limit value for the tank = 0.56, as determined from testing;

fraction methane/ethane = 0.52, as determined from testing;

100% LEL conc. = 45mg/L, value of the Lower Explosion Limit (100% LEL) expressed in a concentration that is constant for alkanes, Industrial Explosion and Protection, Frank T. Bodurtha, p12, McGraw Hill, 1980; and

Flow = vent flow, (cfm) = 60 cfm.

$$\text{Controlled VOC emissions (tpy)} = \text{VOC emissions(lb/yr)} * (1 - \text{control efficiency}) * (\text{capture efficiency}) * (\text{ton}/2,000\text{lbs})$$

Where:

Control efficiency = 95%, as determined from most recent stack test;

and

Capture efficiency = 100%, assumed since closed loop system vented to control device.

- b. Emission Limitation:

0.17 tpy particulates

Applicable Compliance Method:

$$\text{Controlled particulate emissions (tpy)} = \text{Controlled VOC emissions (tpy)} * (0.28)$$

From testing, it has been determined that 28% of VOC emissions are considered particulate emissions.

If required, compliance with this mass emission limitation shall be based on stack testing in accordance with Method 5 of 40 CFR Part 60, Appendix A.

c. Emission Limitation:

0.49 tpy CO

Applicable Compliance Method:

$$\text{Uncontrolled CO(lb/yr)} = \text{EF} * \text{C} * (0.028\text{m}^3/\text{cf}) * (\text{lb}/454,000\text{mg}) \\ * \text{Flow} * (60\text{min}/\text{hr}) * (8760 \text{ hr}/\text{yr})$$

Where:

EF = 1.14 mg/m<sup>3</sup>/ppm emission factor from AP-42 for CO;  
 C = pollutant concentration (ppm) from correlation of the concentration of CO based on the LEL of asphalt = 12.43 \* %LEL + 800 for oxidized asphalt = 8752 ppm; and  
 Flow = vent flow, (cfm) = 60 cfm.

$$\text{Controlled CO emissions (tpy)} = \text{CO emissions(lb/yr)} * (1 - \text{control efficiency}) * (\text{capture efficiency}) * (\text{ton}/2,000\text{lbs})$$

Where:

Control efficiency = 95%, as determined from most recent stack test;  
 and  
 Capture efficiency = 100%, assumed since closed loop system vented to control device.

d. Emission Limitation:

0.07 tpy H<sub>2</sub>S

Applicable Compliance Method:

$$\text{Uncontrolled H}_2\text{S(lb/yr)} = \text{EF} * \text{C} * (0.028\text{m}^3/\text{cf}) * (\text{lb}/454,000\text{mg}) \\ * \text{Flow} * (60\text{min}/\text{hr}) * (8760 \text{ hr}/\text{yr})$$

Where:

EF = 1.39 mg/m<sup>3</sup>/ppm emission factor from AP-42 for H<sub>2</sub>S;  
 C = pollutant concentration (ppm) from correlation of the concentration of H<sub>2</sub>S based on the LEL of asphalt = 12.43 \* %LEL + 400.5 for oxidized asphalt = 1096.58 ppm; and  
 Flow = vent flow, (cfm) = 60 cfm.

Controlled H<sub>2</sub>S emissions (tpy) = H<sub>2</sub>S emissions(lb/yr) \* (1 - control efficiency) \*(capture efficiency) \* (ton/2,000lbs)

Where:

Control efficiency = 95%, as determined from most recent stack test;

and

Capture efficiency = 100%, assumed since closed loop system vented to control device.

e. Emission Limitation:

2.65 tpy SO<sub>2</sub>

Applicable Compliance Method:

SO<sub>2</sub> emissions (tpy) = [Uncontrolled H<sub>2</sub>S emissions (tpy) -  
Controlled H<sub>2</sub>S emissions (tpy)] \* 1.88

## VI. Miscellaneous Requirements

None.