



11/4/2013

Certified Mail

Facility ID: 1652050040  
Permit Number: P0115546  
County: Medina

Brian Thomas  
Owens Corning Roofing and Asphalt, LLC  
890 W. Smith Road  
Medina, OH 44256

RE: FINAL AIR POLLUTION CONTROL TITLE V PERMIT  
Permit Type: Administrative Permit Modification

Dear Permit Holder:

Enclosed is a final Ohio Environmental Protection Agency (EPA) Air Pollution Title V permit that allows you to operate the facility in the manner indicated in the permit. Because this permit may contain several conditions and restrictions, we urge you to read it carefully. In this letter you will find the information on the following topics:

- **How to appeal this permit**
- **How to save money, reduce pollution and reduce energy consumption**
- **How to give us feedback on your permitting experience**
- **How to get an electronic copy of your permit**

**How to appeal this permit**

The issuance of this Title V permit is a final action of the Director and may be appealed to the Environmental Review Appeals Commission pursuant to Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. The appeal must be filed with the Commission within thirty (30) days after notice of the Director's action. The appeal must be accompanied by a filing fee of \$70.00, made payable to "Ohio Treasurer Josh Mandel," which the Commission, in its discretion, may reduce if by affidavit you demonstrate that payment of the full amount of the fee would cause extreme hardship. Notice of the filing of the appeal shall be filed with the Director within three (3) days of filing with the Commission. Ohio EPA requests that a copy of the appeal be served upon the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission  
77 South High Street, 17th Floor  
Columbus, OH 43215

## **How to save money, reduce pollution and reduce energy consumption**

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

## **How to give us feedback on your permitting experience**

Please complete a survey at [www.epa.ohio.gov/survey.aspx](http://www.epa.ohio.gov/survey.aspx) and give us feedback on your permitting experience. We value your opinion.

## **How to get an electronic copy of your permit**

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

If you have any questions regarding this permit, please contact the Akron Regional Air Quality Management District as indicated on page one of your permit.

Sincerely,



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

Cc: U.S. EPA Region 5 *Via E-Mail Notification*  
Akron Regional Air Quality Management District



**FINAL**

**Division of Air Pollution Control  
Title V Permit  
for  
Owens Corning Roofing and Asphalt, LLC**

Facility ID:	1652050040
Permit Number:	P0115546
Permit Type:	Administrative Permit Modification
Issued:	11/4/2013
Effective:	11/4/2013
Expiration:	8/1/2016





**Division of Air Pollution Control**  
**Title V Permit**  
for  
Owens Corning Roofing and Asphalt, LLC

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## Authorization

Facility ID:	1652050040
Facility Description:	Asphalt Felts and Coatings.
Application Number(s):	M0002395
Permit Number:	P0115546
Permit Description:	APA Title V permit to clarify the ability to store cutback solvent in several storage tanks at Owens Corning Roofing and Asphalt facility consisting of various asphalt blowing stills/convertors, tanks, loading racks, roofing coating lines, and associated material handling operations used in the production of asphalt, and asphalt roofing shingles. Emissions are controlled by various incinerators, scrubber, and fiber bed filters.
Permit Type:	Administrative Permit Modification
Issue Date:	11/4/2013
Effective Date:	11/4/2013
Expiration Date:	8/1/2016
Superseded Permit Number:	P0106884

This document constitutes issuance of an OAC Chapter 3745-77 Title V permit to:

Owens Corning Roofing and Asphalt, LLC  
890 W. Smith Road  
Medina, OH 44256

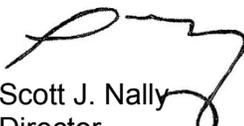
Ohio Environmental Protection Agency (EPA) District Office or local air agency responsible for processing and administering your permit:

Akron Regional Air Quality Management District  
146 South High Street, Room 904  
Akron, OH 44308  
(330)375-2480

The above named entity is hereby granted a Title V permit pursuant to Chapter 3745-77 of the Ohio Administrative Code. This permit and the authorization to operate the air contaminant sources (emissions units) at this facility shall expire at midnight on the expiration date shown above. You will be sent a notice approximately 18 months prior to the expiration date regarding the renewal of this permit. If you do not receive a notice, please contact the Akron Regional Air Quality Management District. If a renewal permit is not issued prior to the expiration date, the permittee may continue to operate pursuant to OAC rule 3745-77-08(E) and in accordance with the terms of this permit beyond the expiration date, if a timely renewal application is submitted. A renewal application will be considered timely if it is submitted no earlier than 18 months and no later than 6 months prior to the expiration date.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

  
Scott J. Nally  
Director



**Final Title V Permit**  
Owens Corning Roofing and Asphalt, LLC  
**Permit Number:** P0115546  
**Facility ID:** 1652050040  
**Effective Date:** 11/4/2013

## **A. Standard Terms and Conditions**



**1. Federally Enforceable Standard Terms and Conditions**

- a) All Standard Terms and Conditions are federally enforceable, with the exception of those listed below which are enforceable under State law only:
- (1) Standard Term and Condition A. 24., Reporting Requirements Related to Monitoring and Record Keeping Requirements of State-Only Enforceable Permit Terms and Conditions
  - (2) Standard Term and Condition A. 25., Records Retention Requirements for State-Only Enforceable Permit Terms and Conditions
  - (3) Standard Term and Condition A. 27., Scheduled Maintenance/Malfunction Reporting
  - (4) Standard Term and Condition A. 29., Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations

*(Authority for term: ORC 3704.036(A))*

**2. Monitoring and Related Record Keeping and Reporting Requirements**

- a) Except as may otherwise be provided in the terms and conditions for a specific emissions unit (i.e., in section C. Emissions Unit Terms and Conditions of this Title V permit), the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
- (1) The date, place (as defined in the permit), and time of sampling or measurements.
  - (2) The date(s) analyses were performed.
  - (3) The company or entity that performed the analyses.
  - (4) The analytical techniques or methods used.
  - (5) The results of such analyses.
  - (6) The operating conditions existing at the time of sampling or measurement.

*(Authority for term: OAC rule 3745-77-07(A)(3)(b)(i))*

- 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 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.

*(Authority for term: OAC rule 3745-77-07(A)(3)(b)(ii))*



c) The permittee shall submit required reports in the following manner:

- (1) All reporting required in accordance with OAC rule 3745-77-07(A)(3)(c) for deviations caused by malfunctions shall be submitted in the following manner:

Any malfunction, as defined in OAC rule 3745-15-06(B)(1), shall be promptly reported to the Ohio EPA in accordance with OAC rule 3745-15-06. In addition, to fulfill the OAC rule 3745-77-07(A)(3)(c) deviation reporting requirements for malfunctions, written reports that identify each malfunction that occurred during each calendar quarter (including each malfunction reported only verbally in accordance with OAC rule 3745-15-06) shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year in accordance with Standard Term and Condition A.2.c)(2) below; and each report shall cover the previous calendar quarter. An exceedance of the visible emission limitations specified in OAC rule 3745-17-07(A)(1) that is caused by a malfunction is not a violation and does not need to be reported as a deviation if the owner or operator of the affected air contaminant source or air pollution control equipment complies with the requirements of OAC rule 3745-17-07(A)(3)(c).

In accordance with OAC rule 3745-15-06, a malfunction reportable under OAC rule 3745-15-06(B) is a deviation of the federally enforceable permit requirements. Even though verbal notifications and written reports are required for malfunctions pursuant to OAC rule 3745-15-06, the written reports required pursuant to this term must be submitted quarterly to satisfy the prompt reporting provision of OAC rule 3745-77-07(A)(3)(c).

In identifying each deviation caused by a malfunction, the permittee shall specify the emission limitation(s) (or control requirement(s)) for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. For a specific malfunction, if this information has been provided in a written report that was submitted in accordance with OAC rule 3745-15-06, the permittee may simply reference that written report to identify the deviation. Nevertheless, all malfunctions, including those reported only verbally in accordance with OAC rule 3745-15-06, must be reported in writing on a quarterly basis.

Any scheduled maintenance, as referenced in OAC rule 3745-15-06(A)(1), that results in a deviation from a federally enforceable emission limitation (or control requirement) shall be reported in the same manner as described above for malfunctions.

*(Authority for term: OAC rule 3745-77-07(A)(3)(c))*

- (2) Except as may otherwise be provided in the terms and conditions for a specific emissions unit (i.e., in section C. Emissions Unit Terms and Conditions of this Title V permit or, in some cases, in section B. Facility-Wide Terms and Conditions of this Title V permit), all reporting required in accordance with OAC rule 3745-77-07(A)(3)(c) for deviations of the emission limitations, operational restrictions, and control device operating parameter limitations shall be submitted in the following manner:

Written reports of (a) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, (b) the probable cause of such deviations, and (c) any corrective actions or preventive



measures taken, shall be promptly made to the appropriate Ohio EPA District Office or local air agency. Except as provided below, the written reports shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

In identifying each deviation, the permittee shall specify the emission limitation(s), operational restriction(s), and/or control device operating parameter limitation(s) for which the deviation occurred, describe each deviation, and provide the estimated magnitude and duration of each deviation.

These written deviation reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c) pertaining to the submission of monitoring reports every six months and to the prompt reporting of all deviations. Full compliance with OAC rule 3745-77-07(A)(3)(c) requires reporting of all other deviations of the federally enforceable requirements specified in the permit as required by such rule.

If an emissions unit has a deviation reporting requirement for a specific emission limitation, operational restriction, or control device operating parameter limitation that is not on a quarterly basis (e.g., within 30 days following the end of the calendar month, or within 30 or 45 days after the exceedance occurs), that deviation reporting requirement satisfies the reporting requirements specified in this Standard Term and Condition for that specific emission limitation, operational restriction, or control device parameter limitation. Following the provisions of that non-quarterly deviation reporting requirement will also satisfy (for the deviations so reported) the requirements of OAC rule 3745-77-07(A)(3)(c) pertaining to the submission of monitoring reports every six months and to the prompt reporting of all deviations, and additional quarterly deviation reports for that specific emission limitation, operational restriction, or control device parameter limitation are not required pursuant to this Standard Term and Condition.

See A.29 below if no deviations occurred during the quarter.

*(Authority for term: OAC rule 3745-77-07(A)(3)(c))*

- (3) All reporting required in accordance with the OAC rule 3745-77-07(A)(3)(c) for other deviations of the federally enforceable permit requirements which are not reported in accordance with Standard Term and Condition A.2)c)(2) above shall be submitted in the following manner:

Unless otherwise specified by rule, written reports that identify deviations of the following federally enforceable requirements contained in this permit; Standard Terms and Conditions: A.3, A.4, A.5, A.7.e), A.8, A.13, A.15, A.19, A.20, A.21, and A.23 of this Title V permit, as well as any deviations from the requirements in section C. Emissions Unit Terms and Conditions of this Title V permit, and any monitoring, record keeping, and reporting requirements, which are not reported in accordance with Standard Term and Condition A.2.c)(2) above shall be submitted (i.e., postmarked) to the appropriate Ohio EPA District Office or local air agency by January 31 and July 31 of each year; and each report shall cover the previous six calendar months. Unless otherwise specified by rule, all other deviations from federally enforceable requirements identified in this permit shall be submitted annually as part of the annual compliance certification, including deviations of federally enforceable requirements not specifically addressed by permit or rule for the



insignificant activities or emissions levels (IEU) identified in section B. Facility-Wide Terms and Conditions of this Title V permit. Annual reporting of deviations is deemed adequate to meet the deviation reporting requirements for IEUs unless otherwise specified by permit or rule.

In identifying each deviation, the permittee shall specify the federally enforceable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation.

These semi-annual and annual written reports shall satisfy the reporting requirements of OAC rule 3745-77-07(A)(3)(c) for any deviations from the federally enforceable requirements contained in this permit that are not reported in accordance with Standard Term and Condition A.2.c)(2) above.

If no such deviations occurred during a six-month period, the permittee shall submit a semi-annual report which states that no such deviations occurred during that period.

*(Authority for term: OAC rules 3745-77-07(A)(3)(c)(i) and (ii) and OAC rule 3745-77-07(A)(13)(b))*

- (4) 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 (including any written malfunction reports required by OAC rule 3745-15-06 that are referenced in the deviation reports) are true, accurate, and complete."

*(Authority for term: OAC rule 3745-77-07(A)(3)(c)(iv))*

- (5) Reports of any required monitoring and/or record keeping information shall be submitted to Akron Regional Air Quality Management District.

*(Authority for term: OAC rule 3745-77-07(A)(3)(c))*

### **3. Scheduled Maintenance**

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. Except as provided in OAC rule 3745-15-06(A)(3), any scheduled maintenance 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). Any scheduled maintenance, as defined in OAC rule 3745-15-06(A)(1), that results in a deviation from a federally enforceable emission limitation (or control requirement) shall be reported in the same manner as described for malfunctions in Standard Term and Condition A.2.c)(1) above.

*(Authority for term: OAC rule 3745-77-07(A)(3)(c))*

### **4. Risk Management Plans**

If applicable, the permittee shall 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"); and, pursuant to 40 C.F.R. 68.215(a), the permittee shall submit either of the following:



- a) a compliance plan for meeting the requirements of 40 C.F.R. Part 68 by the date specified in 40 C.F.R. 68.10(a) and OAC 3745-104-05(A); or
- b) as part of the compliance certification submitted under 40 C.F.R. 70.6(c)(5), a certification statement that the source is in compliance with all requirements of 40 C.F.R. Part 68 and OAC Chapter 3745-104, including the registration and submission of the risk management plan.

*(Authority for term: OAC rule 3745-77-07(A)(4))*

## **5. 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.

*(Authority for term: OAC rule 3745-77-07(A)(5))*

## **6. 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.

*(Authority for term: OAC rule 3745-77-07(A)(6))*

## **7. 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, in accordance with Standard Term and Condition A.11 below. 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.

- f) Except as otherwise indicated below, this Title V permit, or permit modification, is effective for five years from the original effective date specified in the permit. In the event that this facility becomes eligible for non-title V permits, this permit shall cease to be enforceable when:
- (1) the permittee submits an approved facility-wide potential to emit analysis supporting a claim that the facility no longer meets the definition of a "major source" as defined in OAC rule 3745-77-01(W) based on the permanent shutdown and removal of one or more emissions units identified in this permit; or the permittee no longer meets the definition of a "major source" as defined in OAC rule 3745-77-01(W) based on obtaining restrictions on the facility-wide potential(s) to emit that are federally enforceable or legally and practically enforceable ; or a combination of (1) and (2) above.

The permittee shall continue to comply with all applicable OAC Chapter 3745-31 requirements for all regulated air contaminant sources once this permit ceases to be enforceable. The permittee shall comply with any residual requirements, such as quarterly deviation reports, semi-annual deviation reports, and annual compliance certifications covering the period during which this Title V permit was enforceable. All records relating to this permit must be maintained in accordance with law.

*(Authority for term: OAC rule 3745-77-01(W), OAC rule 3745-77-07(A)(3)(b)(ii), OAC rule 3745-77(A)(7))*

## **8. 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.

*(Authority for term: OAC rule 3745-77-07(A)(8))*

## **9. Marketable Permit Programs**

No revision of this permit is required under any approved economic incentive, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in this permit.

*(Authority for term: OAC rule 3745-77-07(A)(9))*

## **10. Reasonably Anticipated Operating Scenarios**

The permittee is hereby authorized to make changes among operating scenarios authorized in this permit without notice to the Ohio EPA, but, contemporaneous with making a change from one operating scenario to another, the permittee must record in a log at the permitted facility the scenario under which the permittee is operating. The permit shield provided in these standard terms and conditions shall apply to all operating scenarios authorized in this permit.

*(Authority for term: OAC rule 3745-77-07(A)(10))*



## **11. Reopening for Cause**

This Title V permit will be reopened prior to its expiration date under the following conditions:

- a) Additional applicable requirements under the Act become applicable to one or more emissions units covered by this permit, and this permit has a remaining term of three or more years. Such a reopening shall be completed not later than eighteen (18) months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to paragraph (E)(1) of OAC rule 3745-77-08.
- b) This permit is issued to an affected source under the acid rain program and additional requirements (including excess emissions requirements) become applicable. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit, and shall not require a reopening of this permit.
- c) The Director of the Ohio EPA or the Administrator of the U.S. EPA determines that the federally applicable requirements in this permit are based on a material mistake, or that inaccurate statements were made in establishing the emissions standards or other terms and conditions of this permit related to such federally applicable requirements.
- d) The Administrator of the U.S. EPA or the Director of the Ohio EPA determines that this permit must be revised or revoked to assure compliance with the applicable requirements.

*(Authority for term: OAC rules 3745-77-07(A)(12) and 3745-77-08(D))*

## **12. 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.

*(Authority for term: OAC rule 3745-77-07(B))*

## **13. Compliance Requirements**

- a) Any document (including reports) required to be submitted and required by a federally applicable requirement in this Title V 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:
  - (1) 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.



- (2) 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.
  - (3) Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
  - (4) 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:
- (1) Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
  - (2) 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 Director (the appropriate Ohio EPA District Office or local air agency) and the Administrator of the U.S. EPA in the following manner and with the following content:
- (1) Compliance certifications shall be submitted annually on a calendar year basis. The annual certification shall be submitted (i.e., postmarked) on or before April 30th of each year during the permit term.
  - (2) 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.



- (3) Compliance certifications shall contain such additional requirements as may be specified pursuant to sections 114(a)(3) and 504(b) of the Act.

*(Authority for term: OAC rules 3745-77-07(C)(1),(2),(4) and (5) and ORC section 3704.03(L))*

**14. Permit Shield**

- a) Compliance with the terms and conditions of this permit (including terms and conditions established for alternate operating scenarios, emissions trading, and emissions averaging, but excluding terms and conditions for which the permit shield is expressly prohibited under OAC rule 3745-77-07) shall be deemed compliance with the applicable requirements identified and addressed in this permit as of the date of permit issuance.
- b) This permit shield provision shall apply to any requirement identified in this permit pursuant to OAC rule 3745-77-07(F)(2), as a requirement that does not apply to the source or to one or more emissions units within the source.

*(Authority for term: OAC rule 3745-77-07(F))*

**15. Operational Flexibility**

The permittee is authorized to make the changes identified in OAC rule 3745-77-07(H)(1)(a) to (H)(1)(c) within the permitted stationary source without obtaining a permit revision, if such change is not a modification under any provision of Title I of the Act [as defined in OAC rule 3745-77-01(JJ)], and does not result in an exceedance of the emissions allowed under this permit (whether expressed therein as a rate of emissions or in terms of total emissions), and the permittee provides the Administrator of the U.S. EPA and the appropriate Ohio EPA District Office or local air agency with written notification within a minimum of seven days in advance of the proposed changes, unless the change is associated with, or in response to, emergency conditions. If less than seven days notice is provided because of a need to respond more quickly to such emergency conditions, the permittee shall provide notice to the Administrator of the U.S. EPA and the appropriate District Office of the Ohio EPA or local air agency as soon as possible after learning of the need to make the change. The notification shall contain the items required under OAC rule 3745-77-07(H)(2)(d).

*(Authority for term: OAC rules 3745-77-07(H)(1) and (2))*

**16. 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.

*(Authority for term: OAC rule 3745-77-07(G))*

**17. Off-Permit Changes**

The owner or operator of a Title V source may make any change in its operations or emissions at the source that is not specifically addressed or prohibited in the Title V permit, without obtaining an amendment or modification of the permit, provided that the following conditions are met:



- a) The change does not result in conditions that violate any applicable requirements or that violate any existing federally enforceable permit term or condition.
- b) The permittee provides contemporaneous written notice of the change to the Director and the Administrator of the U.S. EPA, except that no such notice shall be required for changes that qualify as insignificant emissions levels or activities as defined in OAC rule 3745-77-01(U). Such written notice shall describe each such change, the date of such change, any change in emissions or pollutants emitted, and any federally applicable requirement that would apply as a result of the change.
- c) The change shall not qualify for the permit shield under OAC rule 3745-77-07(F).
- d) The permittee shall keep a record describing all changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes.
- e) The change is not subject to any applicable requirement under Title IV of the Act or is not a modification under any provision of Title I of the Act.

Paragraph (I) of rule 3745-77-07 of the Administrative Code applies only to modification or amendment of the permittee's Title V permit. The change made may require a permit-to-install under Chapter 3745-31 of the Administrative Code if the change constitutes a modification as defined in that Chapter. Nothing in paragraph (I) of rule 3745-77-07 of the Administrative Code shall affect any applicable obligation under Chapter 3745-31 of the Administrative Code.

*(Authority for term: OAC rule 3745-77-07(I))*

## **18. Compliance Method Requirements**

Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defenses otherwise available to the permittee, including but not limited to, any challenge to the Credible Evidence Rule (see 62 Fed. Reg. 8314, Feb. 24, 1997), in the context of any future proceeding.

*(This term is provided for informational purposes only.)*

## **19. Insignificant Activities or Emissions Levels**

Each IEU that has one or more applicable requirements shall comply with those applicable requirements.

*(Authority for term: OAC rule 3745-77-07(A)(1))*

## **20. Permit to Install Requirement**

Prior to the "installation" or "modification" of any "air contaminant source," as those terms are defined in OAC rule 3745-31-01, a permit to install must be obtained from the Ohio EPA pursuant to OAC Chapter 3745-31.

*(Authority for term: OAC rule 3745-77-07(A)(1))*



**21. 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.

*(Authority for term: OAC rule 3745-77-07(A)(1))*

**22. Permanent Shutdown of an Emissions Unit**

The permittee may notify Ohio EPA of any emissions unit that is permanently shut down by submitting a certification from the responsible official that identifies the date on which the emissions unit was permanently shut down. Authorization to operate the affected emissions unit shall cease upon the date certified by the responsible official that the emissions unit was permanently shut down.

After the date on which an emissions unit is permanently shut down (i.e., that has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31 and therefore ceases to meet the definition of an "emissions unit" as defined in OAC rule 3745-77-01(O)), rendering existing permit terms and conditions irrelevant, the permittee shall not be required, after the date of the certification and submission to Ohio EPA, to meet any Title V permit requirements applicable to that emissions unit, except for any residual requirements, such as the quarterly deviation reports, semi-annual deviation reports and annual compliance certification covering the period during which the emissions unit last operated. All records relating to the shutdown emissions unit, generated while the emissions unit was in operation, must be maintained in accordance with law.

No emissions unit certified by the responsible official as being permanently shut down may resume operation without first applying for and obtaining a permit to install pursuant to OAC Chapter 3745-31.

*(Authority for term: OAC rule 3745-77-01)*

**23. Title VI Provisions**

If applicable, the permittee shall comply with the standards for recycling and reducing emissions of ozone depleting substances pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners in Subpart B of 40 CFR Part 82:

- a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices specified in 40 CFR 82.156.
- b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment specified in 40 CFR 82.158.
- c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

*(Authority for term: OAC rule 3745-77-01(H)(11))*



**24. Reporting Requirements Related to Monitoring and Record Keeping Requirements Under State Law Only**

The permittee shall submit required reports in the following manner:

- a) Reports of any required monitoring and/or record keeping 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 (i) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and record keeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) 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. In identifying each deviation, the permittee shall specify the applicable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. 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 (i.e., postmarked) quarterly, 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.)

**25. Records Retention Requirements Under State Law Only**

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.

**26. 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.

*(Authority for term: OAC rule 3745-77-07(C))*



**27. 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).

**28. 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.

*(Authority for term: OAC rule 3745-77-01(C))*

**29. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations**

If no emission limitation (or control requirement), operational restriction and/or control device parameter limitation 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 (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

The permittee is not required to submit a quarterly report which states that no deviations occurred during that quarter for the following situations:

- a) where an emissions unit has deviation reporting requirements for a specific emission limitation, operational restriction, or control device parameter limitation that override the deviation reporting requirements specified in Standard Term and Condition A.2.c)(2); or
- b) where an uncontrolled emissions unit has no monitoring, record keeping, or reporting requirements and the emissions unit's applicable emission limitations are established at the potentials to emit; or
- c) where the company's responsible official has certified that an emissions unit has been permanently shut down.



**Final Title V Permit**  
Owens Corning Roofing and Asphalt, LLC  
**Permit Number:** P0115546  
**Facility ID:** 1652050040  
**Effective Date:** 11/4/2013

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



1. All the following facility-wide terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:

a) B.16.

2. This facility is subject to the applicable requirements specified in OAC Chapter 3745-25. The emission control action programs, as specified in OAC rule 3745-25-03, shall be developed and submitted within 60 days after receiving notification from the Ohio EPA.

*(Authority for terms: OAC rule 3745-25-04)*

3. The following emissions units contained in this permit are subject to 40 CFR Part 63, Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Stationary Internal Combustion Engines:

B014 - Emergency Generator #2.

a) Applicable Emissions Limitations and/or Work Practice Standards

	Applicable Rules/Requirements	Applicable Emissions Limitations/Work Practice Standards
a.	40 CFR 63.6590(b)(3)	<p><b>For B014:</b></p> <p>Exempt from the requirements of Subpart ZZZZ and Subpart A.</p> <p>Existing compression ignition emergency stationary RICE with a site rating of more than 500 brake HP located as a major source of HAP emissions.</p>

The complete MACT requirements, including the MACT General Provisions may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website <http://ecfr.gpoaccess.gov> or by contacting the appropriate Ohio EPA District office or local air agency.

*(Authority for term: 40 CFR 63, Subpart ZZZZ)*

4. The following emissions units contained in this permit are subject to 40 CFR Part 63, Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters:

B006 - Asphalt Preheater.

On May 16, 2011, U.S. EPA decided to Stay the Boiler MACT (40 CFR Part 63, Subpart DDDDD). This delay of effectiveness will remain in place until the proceedings for judicial review are completed or U.S. EPA completes its reconsideration of the rules, whichever is earlier, and the Agency publishes a notice in the Federal Register announcing that the rules are in effect. Upon being effective, this emissions unit will be subject to 40 CFR Part 63, Subpart DDDDD.

*(Authority for term: 40 CFR Part 63, Subpart DDDDD)*



5. This facility is subject to the applicable requirements specified in 40 CFR 63, Subpart LLLLLL - National Emission Standards for Hazardous air Pollutants for Asphalt Processing and Asphalt Roofing Manufacturing.
- a) For each Group 1 asphalt loading rack and blowing still:
    - (1) reduce total hydrocarbon mass emissions by 95%, or to a concentration of 20 ppmv, on a dry basis corrected to 3 percent oxygen; or
    - (2) route the emissions to a combustion device achieving a combustion efficiency of 99.5 percent.
  - b) Total particulate emissions from the coating mixer, coater, sealant applicator, and adhesive applicator at each existing asphalt manufacturing line shall be limited to 0.04 kilograms per megagram (kg/Mg) (0.08 pounds per ton, lb/ton) of asphalt shingle or mineral-surfaced roll roofing produced.
  - c) For each existing coater:
    - (1) limit exhaust gases to 20% opacity; and
    - (2) limit visible emissions from the emission capture system to 20% of any period of consecutive valid observations totaling 60 minutes.
  - d) For each Group 2 asphalt storage tank:
    - (1) limit exhaust gases to 0% opacity.

Table 7 to Subpart LLLLLL of 40 CFR Part 63 - Applicability of General Provisions to Subpart LLLLLL shows which parts of the General Provisions in 40 CFR 63.1 - 15 apply.

The complete MACT requirements, including the MACT General Provisions may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website <http://ecfr.gpoaccess.gov> or by contacting the appropriate Ohio EPA District office or local air agency.

*(Authority for term: 40 CFR 63, Subpart LLLLLL)*

6. This facility is subject to the applicable requirements specified in 40 CFR 63, Subpart JJJJ - National Emission Standards for Hazardous air Pollutants for Paper and Other Web Coating.

Table 2 to Subpart JJJJ of 40 CFR Part 63 - Applicability of General Provisions to Subpart JJJJ shows which parts of the General Provisions in 40 CFR 63.1 - 15 apply.

The complete MACT requirements, including the MACT General Provisions may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website <http://ecfr.gpoaccess.gov> or by contacting the appropriate Ohio EPA District office or local air agency.

*(Authority for term: 40 CFR 63, Subpart JJJJ)*

7. Stack emissions shall be limited to 0.01 grains per dry standard cubic foot (gr/dscf) of particulate emissions for the 4-Wide and Roofing Line process dust collectors. These limitations were established



pursuant to PTI 16-02347 (6/14/2004)/PTI P0106752 (9/23/2010). These process dust collectors control the following emissions units:

4-Wide Process Dust Collector

P916 - Mat Unwind #2;  
P909 - Material Surfacing Applicator #2;  
P918 - Surfacing Material System #1; and  
P922 - Surfacing Material System #2.

Roofing Line Process Dust Collector

P905 - Material Surfacing Applicator #1; and  
P909 - Material Surfacing Applicator #2.

*(Authority for term: OAC rule 3745-31-05(A)(3))*

a) Testing Requirements

(1) Compliance with the emission limitations in section B)(7) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

PE shall not exceed 0.01 grain per dry standard cubic foot of exhaust gases (gr/dscf) from the 4-Wide and roofing line process dust collectors.

Applicable Compliance Method:

Compliance with the limitation shall be determined through the results of testing in accordance with Methods 1 - 5 of 40 CFR Part 60, Appendix A in accordance with f)(2).

*(Authority for term: OAC rule 3745-77-07(C)(1))*

(2) The permittee shall conduct, or have conducted, emission testing for emissions units P905, P909, P916, P918, and P922 in accordance with the following requirements:

a. The emission testing shall be conducted within 12 months prior to the permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the particulate mass emission limitations for the 4-Wide and Roofing Line process dust collectors.

c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

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



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

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

*(Authority for term: OAC rule 3745-77-07(C)(1))*

8. Stack emissions shall be limited to 0.02 grains per dry standard cubic foot (gr/dscf) of particulate emissions for the 3-Wide process dust collector. This limitation was established pursuant to PTI P0106752 (9/23/2010). The process dust collector controls the following emissions units:

3-Wide Process Dust Collector

P905 - Material Surfacing Applicator #1;  
P914 - Mat Unwind #1;  
P918 - Surfacing Material System #1; and  
P922 - Surfacing Material System #2.

*(Authority for term: OAC rule 3745-31-05(F))*

- a) Testing Requirements
  - (1) Compliance with the emission limitations in section B)(7) of these terms and conditions shall be determined in accordance with the following methods:



a. Emission Limitation:

PE shall not exceed 0.02 grain per dry standard cubic foot of exhaust gases (gr/dscf) from the 3-Wide process dust collector.

Applicable Compliance Method:

Compliance with the limitation shall be determined through the results of testing in accordance with Methods 1 - 5 of 40 CFR Part 60, Appendix A in accordance with f)(2).

*(Authority for term: OAC rule 3745-77-07(C)(1))*

(2) The permittee shall conduct, or have conducted, emission testing for emissions units P905, P914, P918, and P922 in accordance with the following requirements:

a. The emission testing shall be conducted within 12 months prior to the permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the particulate mass emission limitations for the 3-Wide process dust collector.

c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

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

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

d. The test(s) shall be conducted while 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.

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

f. 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.

g. 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.

*(Authority for term: OAC rule 3745-77-07(C)(1))*

9. In order to comply with the air dispersion modeling requirements from the federal Prevention of Significant Deterioration (PSD) rules and OAC rules 3745-31-13 through 3745-31-20, the following exhaust stack requirements shall be maintained:
- a) exhaust stack from the JZ thermal incinerator (egress point A43) that serves emissions units T007 - T009, T026, T029, T031 - T033, and P003 - P005 shall be at least 120 feet above ground level and in be in compliance with all variables associated with that exhaust stack that demonstrated compliance with those requirements;
  - b) exhaust stack from the asphalt pre-heater (egress point A42A) that serves emissions unit B006 shall be at least 35 feet above ground level and in be in compliance with all variables associated with that exhaust stack that demonstrated compliance with those requirements;
  - c) exhaust stack from the PCC thermal incinerator (egress point A74A) that serves emission units T027, T030, J005, P006, and P007 shall be at least 135 feet above ground level and in be in compliance with all variables associated with that exhaust stack that demonstrated compliance with those requirements; and
  - d) exhaust stack from the emergency generator (egress points A105 and A106) that serves emissions unit B014 shall be at least 45 feet above ground level and in be in compliance with all variables associated with that exhaust stack that demonstrated compliance with those requirements.

*(Authority for term: OAC rules 3745-31-13 through 3745-31-20)*

### **Fuel Oil Requirements**

10. The permittee shall not combust any No. 2 distillate fuel oil at the facility that has a sulfur content greater than 0.3% by weight.
- (Authority for term: OAC rules 3745-31-05(A)(3) and 3745-77-07(A)(1))*
11. The maximum annual operating hours for the firing of No. 2 distillate fuel oil in each of the following emissions units: Boiler #1 (B004), Boiler #2 (B002), and Hot Oil Heater #5 (B107) shall not exceed 500 hours per year, based upon a rolling, 12-month summation of the operating hours. The permittee has existing operation records and, therefore, does not need to be limited to first year monthly operating hours.
- (Authority for term: OAC rules 3745-31-05(A)(3) and 3745-77-07(A)(1))*
12. The permittee shall maintain monthly records of the operating hours for the firing of No. 2 distillate fuel oil in each of the missions units Boiler #1 (B004), Boiler #2 (B002), and Hot Oil Heater #5 (B107).
- (Authority for term: OAC rules 3745-31-05(A)(3) and 3745-77-07(C)(1))*



13. The permittee shall maintain records of the oil burned at the facility in accordance with either Alternative 1 or Alternative 2 described below:

a) Alternative 1:

For each shipment of oil received for burning at the facility, the permittee shall collect or require the oil supplier to collect a representative grab sample of oil and maintain records of the total quantity of oil received, the permittee's or oil supplier's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lbs/MMBtu). The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F). A shipment may be comprised of multiple tank truck loads from the same supplier's batch, or may be represented by single or multiple pipeline deliveries from the same supplier's batch, and the quality of the oil for those loads or pipeline deliveries may be represented by a single batch analysis from the supplier.

b) Alternative 2:

The permittee shall collect a representative grab sample of oil that is burned at the facility for each day when the emissions unit is in operation. If additional fuel oil is added to the tank serving the facility on a day when the facility is in operation, the permittee shall collect a sufficient number of grab samples to develop a composite sample representative of the fuel oil burned in this emissions unit. A representative grab sample of oil does not need to be collected on days when this emissions unit is only operated for the purpose of "test-firing." The permittee shall maintain records of the total quantity of oil burned each day, except for the purpose of test-firing, the permittee's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lbs/MMBtu). The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F).

The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60, Appendix A, Method 19, or the appropriate ASTM methods, such as ASTM methods D240 Standard Test Method for Heat of Combustion of Liquid Hydrocarbon Fuels by Bomb Calorimeter and D4294, Standard Test Method for Sulfur in Petroleum and Petroleum Products by Energy-Dispersive X-Ray Fluorescence Spectrometry, or equivalent methods as approved by the Director.

*(Authority for term: OAC rules 3745-18-04(E)(3) and 3745-18-04(I))*

14. The permittee shall submit quarterly deviation (excursion) reports that identify the following:

- a) all exceedances of the rolling, 12-month operating hours limitation; and
- b) any deviation from the allowable sulfur content limitation.

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

*(Authority for term: OAC rule 3745-15-03(B)(1)(a), OAC rule 3745-15-03(C), and OAC rule 3745-77-07(A)(3)(c))*

15. The following insignificant emissions units at this facility must comply with all applicable state and federal regulations, as well as any emissions limitations and/or control requirements contained within the identified permit to install for the emissions unit. The insignificant emissions units listed below are



subject to one or more applicable requirements contained in a permit-to-install or in the SIP approved versions of OAC Chapters 3745-17, 3745-18, and 3745-21 and/or 40 CFR Part 60 or 63:

B002 - Boiler #2;  
B003 - Boiler #3;  
B004 - Boiler #1;  
B005 - Boiler #4;  
B014 - Emergency Generator #2;  
B101 - Asphalt Preheater #1;  
B102 - Asphalt Preheater #2;  
B104 - Hot Oil Heater #1;  
B105 - Hot Oil Heater #2;  
B106 - Hot Oil Heater #3;  
B107 - Hot Oil Heater #5;  
B108 - Asphalt Preheater #3;  
F104 - Roadways and Parking Areas;  
P102 - Ink Jet Printer #1;  
P103 - Ink Jet Printer #2;  
T039 - Cutter Stock Storage Tank #16; and  
T041 - Cutter Stock Storage Tank #18.

*(Authority for term: OAC rule 3745-77-07(A)(13))*

16. The following insignificant emissions units located at this facility are exempt from permit requirements because they are not subject to any applicable requirements (as defined in OAC rule 3745-77-01(H)) or because they meet the “de minimis” criteria established in OAC rule 3745-15-05:

B007 - Hot Oil Heater #4;  
B008 - Asphalt Storage Tank #25 Burner;  
B009 - Asphalt Storage Tank #28 Burner;  
B010 - Asphalt Storage Tank #53 Burner;  
F102 - Recyclable Material Storage Pile;  
F106 - Cooling Tower #1;  
F107 - Cooling Tower #2;  
F108 - Cooling Tower #3;  
F109 - Cooling Tower #4;  
K101 - Nailer Line Roller #1;  
K102 - Nailer Line Roller #2;  
L001 - Parts Washer #1;  
L101 - Parts Washer #2;  
P923 - Backdust Reintroduction System;  
T040 - Catalyst Storage Tank #17;  
T042 - Catalyst Storage Tank #19;  
T043 - Fuel Oil Storage Tank;  
T044 - Propane Storage Tank;  
T045 - Gasoline Storage Tank;  
T046 - Kerosene Storage Tank;  
T048 - Diesel Storage Tank #1; and  
T049 - Diesel Storage Tank #2.



17. The JZ Thermal Incinerator is required to meet the requirements of PTI 16-02347 (8/16/2005):

a) Applicable Emissions Limitations and/or Work Practice Standards

	Applicable Rules/Requirements	Applicable Emissions Limitations/Work Practice Standards
a.	OAC rule 3745-31-05(A)(3)  (PTI 16-02347, as effective 8/16/05)	<p>PE emissions from the fossil fuel combustion (natural gas or fuel oil) in the JZ thermal incinerator shall not exceed 0.15 pound per hour and 0.64 ton per year, as a rolling, 12-month summation.</p> <p>NOX emissions from the fossil fuel combustion (natural gas or fuel oil) in the JZ thermal incinerator shall not exceed 1.47 pounds per hour and 6.43 tons per year, as a rolling, 12-month summation.</p> <p>SO2 emissions from the fossil fuel combustion (natural gas or fuel oil) in the JZ thermal incinerator shall not exceed 3.13 pounds per hour and 13.69 tons per year, as a rolling, 12-month summation.</p> <p>CO emissions from the fossil fuel combustion (natural gas or fuel oil) in the JZ thermal incinerator shall not exceed 0.84 pound per hour and 3.68 tons per year, as a rolling, 12-month summation.</p> <p>OC emissions from the fossil fuel combustion (natural gas or fuel oil) in the JZ thermal incinerator shall not exceed 0.06 pound per hour and 0.24 ton per year, as a rolling, 12-month summation.</p>

(1) Additional Terms and Conditions

a. None

b) Operational Restrictions

(1) None

c) Monitoring and/or Recordkeeping Requirements

(1) None.



d) Reporting Requirements

(1) None

e) Testing Requirements

(1) Compliance with the emission limitations in section b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

PE emissions from products of combustion shall not exceed 0.15 pound per hour, and 0.64 ton per year, as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance with the hourly limitation may be determined by multiplying the maximum input capacity (10.2 MMBtu/hr) of the thermal incinerator by the AP-42 emission factor for the combustion of fuel oil.

If required, compliance with the hourly PE limitation shall be demonstrated through the results of stack testing performed in accordance with Methods 1 - 5 of 40 CFR Part 60, Appendix A.

The annual emission limitation was developed by multiplying the hourly mass emission limitation by 8760 hours per year, and then dividing by 2000. Therefore, compliance with the annual limitation shall be demonstrated if compliance with the hourly limitation is maintained.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

b. Emission Limitation:

NOX emissions from products of combustion shall not exceed 1.47 pound per hour, and 6.43 ton per year, as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance with the hourly limitation may be determined by multiplying the maximum input capacity (10.2 MMBtu/hr) of the thermal incinerator by the AP-42 emission factor for the combustion of fuel oil.

If required, compliance with the hourly NOX limitation shall be demonstrated through the results of stack testing performed in accordance with Methods 1 - 4, and 7 or 7E of 40 CFR Part 60, Appendix A.

The annual emission limitation was developed by multiplying the hourly mass emission limitation by 8760 hours per year, and then dividing by 2000. Therefore, compliance with the annual limitation shall be demonstrated if compliance with the hourly limitation is maintained.



*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

c. Emission Limitation:

SO<sub>2</sub> emissions from products of combustion shall not exceed 3.13 pound per hour, and 13.69 ton per year, as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance with the hourly limitation may be determined by multiplying the maximum input capacity (10.2 MMBtu/hr) of the thermal incinerator by the AP-42 emission factor for the combustion of fuel oil.

If required, compliance with the hourly SO<sub>2</sub> limitation shall be demonstrated through the results of stack testing performed in accordance with Methods 1 - 4, and 6 or 6C of 40 CFR Part 60, Appendix A.

The annual emission limitation was developed by multiplying the hourly mass emission limitation by 8760 hours per year, and then dividing by 2000. Therefore, compliance with the annual limitation shall be demonstrated if compliance with the hourly limitation is maintained.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

d. Emission Limitation:

CO emissions from products of combustion shall not exceed 0.84 pound per hour, and 3.68 ton per year, as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance with the hourly limitation may be determined by multiplying the maximum input capacity (10.2 MMBtu/hr) of the thermal incinerator by the AP-42 emission factor for the combustion of natural gas.

If required, compliance with the hourly CO limitation shall be demonstrated through the results of stack testing performed in accordance with Methods 1 - 4, and 10 of 40 CFR Part 60, Appendix A.

The annual emission limitation was developed by multiplying the hourly mass emission limitation by 8760 hours per year, and then dividing by 2000. Therefore, compliance with the annual limitation shall be demonstrated if compliance with the hourly limitation is maintained.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

e. Emission Limitation:

OC emissions from products of combustion shall not exceed 0.06 pound per hour, and 0.24 ton per year, as a rolling, 12-month summation.



Applicable Compliance Method:

Compliance with the hourly limitation may be determined by multiplying the maximum input capacity (10.2 MMBtu/hr) of the thermal incinerator by the AP-42 emission factor for the combustion of natural gas.

If required, compliance with the hourly OC limitation shall be demonstrated through the results of stack testing performed in accordance with Methods 1 - 4 and 18 or 25/25A of 40 CFR Part 60, Appendix A.

The annual emission limitation was developed by multiplying the hourly mass emission limitation by 8760 hours per year, and then dividing by 2000. Therefore, compliance with the annual limitation shall be demonstrated if compliance with the hourly limitation is maintained.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

f) Miscellaneous Requirements

(1) None.

18. The PCC Incinerator is required to meet the requirements of PTI 16-02347 (8/16/2005):

a) Applicable Emissions Limitations and/or Work Practice Standards

	Applicable Rules/Requirements	Applicable Emissions Limitations/Work Practice Standards
a.	OAC rule 3745-31-05(A)(3)  (PTI 16-02347, as effective 8/16/05)	PE emissions from fossil fuel combustion (natural gas or fuel oil) in the PCC thermal incinerator shall not exceed 0.17 pound per hour and 0.76 ton per year, as a rolling 12-month summation.  Nitrogen oxides (NOX) emissions from fossil fuel combustion (natural gas or fuel oil) in the PCC thermal incinerator shall not exceed 1.73 pounds per hour and 7.56 ton per year, as a rolling 12-month summation.  SO2 emissions from fossil fuel combustion (natural gas or fuel oil) in the PCC thermal incinerator shall not exceed 3.68 pounds per hour and 16.11 tons per year, as a rolling 12-month summation.  CO emissions from fossil fuel combustion (natural gas or fuel oil) in the PCC thermal incinerator shall not exceed 0.99 pound per hour and 4.33 ton per year, as



	Applicable Rules/Requirements	Applicable Emissions Limitations/Work Practice Standards
		a rolling 12-month summation.  VOC emissions from fossil fuel combustion (natural gas or fuel oil) in the PCC thermal incinerator shall not exceed 0.06 pound per hour and 0.28 ton per year, as a rolling 12-month summation.

- (1) Additional Terms and Conditions
  - a. None
- b) Operational Restrictions
  - (1) None
- c) Monitoring and/or Recordkeeping Requirements
  - (1) None.
- d) Reporting Requirements
  - (1) None
- e) Testing Requirements
  - (1) Compliance with the emission limitations in section b)(1) of these terms and conditions shall be determined in accordance with the following methods:
    - a. Emission Limitation:
 

PE emissions from fossil fuel combustion shall not exceed 0.17 pound per hour and 0.76 ton per year, as a rolling 12-month summation.

Applicable Compliance Method:

Compliance with the hourly limitation may be determined by multiplying the maximum input capacity (12.0 MMBtu/hr) of the thermal incinerator by the AP-42 emission factor for the combustion of fuel oil.

If required, compliance with the hourly PE limitation shall be demonstrated through the results of stack testing performed in accordance with Methods 1 - 4, and 5 of 40 CFR Part 60, Appendix A..

The annual emission limitation was developed by multiplying the hourly mass emission limitation by 8760 hours per year, and then dividing by 2000. Therefore, compliance with the annual limitation shall be demonstrated if compliance with the hourly limitation is maintained.



*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

b. Emission Limitation:

NOX emissions from fossil fuel combustion shall not exceed 1.73 pounds per hour and 7.56 ton per year, as a rolling 12-month summation.

Applicable Compliance Method:

Compliance with the hourly limitation may be determined by multiplying the maximum input capacity (12.0 MMBtu/hr) of the thermal incinerator by the AP-42 emission factor for the combustion of fuel oil.

If required, compliance with the hourly NOX limitation shall be demonstrated through the results of stack testing performed in accordance with Methods 1 - 4, and 7 or 7E of 40 CFR Part 60, Appendix A..

The annual emission limitation was developed by multiplying the hourly mass emission limitation by 8760 hours per year, and then dividing by 2000. Therefore, compliance with the annual limitation shall be demonstrated if compliance with the hourly limitation is maintained.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

c. Emission Limitation:

SO2 emissions from fossil fuel combustion shall not exceed 3.68 pounds per hour and 16.11 tons per year, as a rolling 12-month summation.

Applicable Compliance Method:

Compliance with the hourly limitation may be determined by multiplying the maximum input capacity (12.0 MMBtu/hr) of the thermal incinerator by the AP-42 emission factor for the combustion of fuel oil.

If required, compliance with the hourly SO2 limitation shall be demonstrated through the results of stack testing performed in accordance with Methods 1 - 4, and 6 or 6C of 40 CFR Part 60, Appendix A.

The annual emission limitation was developed by multiplying the hourly mass emission limitation by 8760 hours per year, and then dividing by 2000. Therefore, compliance with the annual limitation shall be demonstrated if compliance with the hourly limitation is maintained.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

d. Emission Limitation:

CO emissions from fossil fuel combustion shall not exceed 0.99 pound per hour and 4.33 ton per year, as a rolling 12-month summation.



Applicable Compliance Method:

Compliance with the hourly limitation may be determined by multiplying the maximum input capacity (12.0 MMBtu/hr) of the thermal incinerator by the AP-42 emission factor for the combustion of natural gas.

If required, compliance with the hourly CO limitation shall be demonstrated through the results of stack testing performed in accordance with Methods 1 - 4, and 10 of 40 CFR Part 60, Appendix A.

The annual emission limitation was developed by multiplying the hourly mass emission limitation by 8760 hours per year, and then dividing by 2000. Therefore, compliance with the annual limitation shall be demonstrated if compliance with the hourly limitation is maintained.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

e. Emission Limitation:

VOC emissions from fossil fuel combustion shall not exceed 0.06 pound per hour and 0.28 ton per year, as a rolling 12-month summation.

Applicable Compliance Method:

Compliance with the hourly limitation may be determined by multiplying the maximum input capacity (12.0 MMBtu/hr) of the thermal incinerator by the AP-42 emission factor for the combustion of natural gas.

If required, compliance with the hourly VOC limitation shall be demonstrated through the results of stack testing performed in accordance with Methods 1 - 4 and 18 or 25/25A of 40 CFR Part 60, Appendix A.

The annual emission limitation was developed by multiplying the hourly mass emission limitation by 8760 hours per year, and then dividing by 2000. Therefore, compliance with the annual limitation shall be demonstrated if compliance with the hourly limitation is maintained.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

f) Miscellaneous Requirements

- (1) None.



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



**1. B006, Asphalt Preheater**

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

Asphalt Preheater - 10.5 MMBtu/hr Asphalt Preheater - Natural Gas or No. 2 Fuel Oil Fired.

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (P0106752, as effective 9/23/10)	No. 2 distillate fuel oil sulfur content shall not exceed 0.3%, by weight.
b.	OAC rule 3745-17-07(A)	Visible particulate emissions (PE) from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by rule.
c.	OAC rule 3745-17-10(B)(1)	PE shall not exceed 0.020 pound per MMBtu of actual heat input.
d.	OAC rule 3745-18-06(D)	Sulfur dioxide (SO <sub>2</sub> ) emissions shall not exceed 1.6 pounds per MMBtu of actual heat input.

(2) Additional Terms and Conditions

a. None.

c) Operational Restrictions

(1) The permittee shall only burn natural gas and/or no. 2 distillate fuel oil in this emissions unit.

*(Authority for term: OAC rule 3745-77-07(A)(1))*

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall maintain records of the oil burned in this emissions unit in accordance with either Alternative 1 or Alternative 2 described below:



a. Alternative 1:

For each shipment of oil received for burning in this emissions unit, the permittee shall collect or require the oil supplier to collect a representative grab sample of oil and maintain records of the total quantity of oil received, the permittee's or oil supplier's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lbs/MMBtu). The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F). A shipment may be comprised of multiple tank truck loads from the same supplier's batch, or may be represented by single or multiple pipeline deliveries from the same supplier's batch, and the quality of the oil for those loads or pipeline deliveries may be represented by a single batch analysis from the supplier.

b. Alternative 2:

The permittee shall collect a representative grab sample of oil that is burned in this emissions unit for each day when the emissions unit is in operation. If additional fuel oil is added to the tank serving the facility on a day when the facility is in operation, the permittee shall collect a sufficient number of grab samples to develop a composite sample representative of the fuel oil burned in this emissions unit. A representative grab sample of oil does not need to be collected on days when this emissions unit is only operated for the purpose of "test-firing." The permittee shall maintain records of the total quantity of oil burned each day, except for the purpose of test-firing, the permittee's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lbs/MMBtu). The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F).

The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60, Appendix A, Method 19, or the appropriate ASTM methods, such as ASTM methods D240 Standard Test Method for Heat of Combustion of Liquid Hydrocarbon Fuels by Bomb Calorimeter and D4294, Standard Test Method for Sulfur in Petroleum and Petroleum Products by Energy-Dispersive X-Ray Fluorescence Spectrometry, or equivalent methods as approved by the Director.

*(Authority for term: OAC rules 3745-18-04(E)(3), 3745-18-04(I), 3745-77-07(C)(1), and 3745-31-05(A)(3))*

- (2) For each day during which the permittee burns a fuel other than natural gas or no. 2 distillate fuel oil, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

*(Authority for term: OAC rule 3745-77-07(C)(1))*



e) Reporting Requirements

- (1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

*(Authority for term: OAC rule 3745-15-03(A))*

- (2) The permittee shall submit quarterly deviation (excursion) reports that identify the following:

- a. any deviation from the allowable sulfur content limitation.; and
- b. each day when a fuel other than natural gas or no. 2 distillate fuel oil was burned in this emissions unit.

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

f) Testing Requirements

- (1) Compliance with the emission limitations in section b)(1) of these terms and conditions shall be determined in accordance with the following methods:

- a. Emission Limitation:

Visible PE from the exhaust stack shall not exceed 20% opacity as a 6-minute average, except as provided by rule.

Applicable Compliance Method:

If required, compliance with the visible PE limitation shall be demonstrated through the results of visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

*(Authority for term: OAC rule 3745-77-07(C)(1))*

- b. Emission Limitation:

PE shall not exceed 0.020 pound per MMBtu of actual heat input.

Applicable Compliance Method:

If required, compliance shall be determined based upon the results of emission testing conducted in accordance with Methods 1-5, of 40 CFR Part 60, Appendix A.

*(Authority for term: OAC rule 3745-77-07(C)(1))*



c. Emission Limitation:

SO<sub>2</sub> emissions shall not exceed 1.6 pounds per MMBtu of actual heat input.

Applicable Compliance Method:

If required, compliance shall be determined based upon the results of emission testing conducted in accordance with Methods 1-4, and 6 or 6C of 40 CFR Part 60, Appendix A.

*(Authority for term: OAC rule 3745-77-07(C)(1))*

g) Miscellaneous Requirements

(1) None.



**2. F002, Asphalt Pouring Shed**

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

Asphalt Pouring Shed - Pouring of Finished Asphalt into Containers

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-17-07(B)	Visible particulate emissions (PE) of fugitive dust shall not exceed 20%, as a 3-minute average.
b.	OAC rule 3745-17-08(B)	The permittee shall control the pouring temperature to the lowest practical temperature to minimize or eliminate visible PE of fugitive dust.

(2) Additional Terms and Conditions

a. None.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions of fugitive dust. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;

b. whether the emissions are representative of normal operations;



- c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
- d. the total duration of any visible emissions incident; and
- e. any corrective actions taken to eliminate the visible emissions.

*(Authority for term: OAC rule 3745-77-07(C)(1))*

e) Reporting Requirements

- (1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

*(Authority for term: OAC rule 3745-15-03(A))*

- (2) The permittee shall submit semiannual written reports that (a) identify all days during which any visible emissions of fugitive dust were observed and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the Akron RAQMD) by January 31 and July 31 of each year and shall cover the previous 6-month period.

*(Authority for term: OAC rule 3745-77-07(C)(1))*

f) Testing Requirements

- (1) Compliance with the emission limitations in section b)(1) of these terms and conditions shall be determined in accordance with the following methods:

- a. Emission Limitation:

Visible PE of fugitive dust shall not exceed 20% opacity as a 3-minute average.

Applicable Compliance Method:

If required, compliance with the visible PE limitation shall be demonstrated through the results of visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

*(Authority for term: OAC rule 3745-77-07(C)(1))*

g) Miscellaneous Requirements

- (1) None.



**3. J005, Asphalt Loading Rack #4**

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

Asphalt Loading Rack #4 Controlled with a Thermal Incinerator

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)  (PTI 16-02347, as effective 8/16/05)	Particulate emissions (PE/PM10) shall not exceed 5.44 pounds per hour.  Sulfur dioxide (SO2) emissions shall not exceed 1.16 pounds per hour.  Carbon monoxide (CO) emissions shall not exceed 0.50 pound per hour.  Hydrogen sulfide (H2S) emissions shall not exceed 0.07 pound per hour.  Volatile organic compound (VOC) emissions shall not exceed 19.29 pounds per hour.  See Section B)(17)-(18) for the fossil fuel combustion emission limits for the thermal incinerators.  Visible PE from the exhaust stack shall not exceed 10% opacity, as a 6-minute average.
b.	OAC rule 3745-17-07(A)(1)	The emissions limitations specified by these rules are less stringent than the emissions limitations established pursuant to OAC rule 3745-31-05(A)(3).
c.	OAC rule 3745-21-07(E)	Exempt.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		Asphalt is not a photochemically reactive material, as defined in OAC rule 3745-21-01(C)(5).  See b)(2)a below.
d.	OAC rules 3745-31-13 through 20	The emissions per rolling, 12-month summation shall not exceed the following:  CO - 0.52 ton per year; VOC - 20.16 ton per year; and SO2 - 1.22 ton per year.  The destruction efficiency shall not be less than 95% for CO and VOC.  See c)(1) below.
e.	OAC rule 3745-31-05(D)	The emissions per rolling, 12-month summation shall not exceed the following:  PE/PM10 - 5.69 ton per year; and H2S - 0.07 ton per year.  See c)(1) below.
f.	40 CFR Part 63, Subpart LLLLLL	Exempt.  Group 2 asphalt loading rack.
g.	OAC rule 3745-17-07(B)	Visible PE of fugitive dust shall not exceed 20% opacity, as a 3-minute average.
h.	OAC rule 3745-17-08	The permittee shall employ overhead filling of tank-trucks to minimize or eliminate fugitive emissions.
i.	OAC rule 3745-17-11(B)(1)	PE shall not exceed 3.05 pounds per hour (based on an uncontrolled mass rate of emissions for J005 of 15.3 pounds per hour, and the use of Curve P-1 of Figure II)

(2) Additional Terms and Conditions

- a. On February 18, 2008, OAC rule 3745-21-07 was revised in its entirety, therefore, the 21-07 rule that was in effect prior to this date is no longer part of the State requirements. On April 4, 2008, the rule revision was submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP); however, until the U.S. EPA approves the revision to OAC rule 3745-21-07, the requirement to



comply with the previous 21-07 rule provisions still exists as part of the federally-approved SIP for Ohio.

- b. All of the captured VOC emissions from this emissions unit shall be vented to the/a thermal incinerator that shall meet the operational, monitoring, and record keeping requirements of this permit, when the emissions unit is in operation.

c) Operational Restrictions

- (1) The total amount of asphalt loaded from this emissions unit shall not exceed 275,000 tons per year, as a rolling 12-month summation. The permittee has existing asphalt production records and; therefore, does not need to be limited to first year asphalt throughput amounts.

*(Authority for term: OAC rule 3745-77-07(A)(1) and 3745-31-05(A)(3))*

d) Monitoring and/or Recordkeeping Requirements

- (1) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable average combustion temperature within the thermal incinerator, for any 3-hour block of time when the emissions unit(s) controlled by the thermal incinerator is/are in operation, shall not be less than 1450 degrees Fahrenheit or more than 50 degrees Fahrenheit below the average temperature measured during the most recent performance test that demonstrated the emissions unit(s) was/were in compliance.

[Note: This Group 2 loading rack is not subject to 40 CFR 63, Subpart LLLLL requirements. However, the PCC and JZ thermal incinerators also control emission sources subject to 40 CFR 63, Subpart LLLLL that are subject to more stringent MACT temperature monitoring requirements.]

*(Authority for term: OAC rule 3745-77-07(A)(1) and 3745-31-05(A)(3))*

- (2) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable range established for the static pressure of the duct downstream of the PCC thermal incinerator is between 0.1 to 12.0 inches of water vacuum, and the acceptable range established for the static pressure of the duct downstream of the JZ thermal incinerator is between -2.5 to 0.8 inches of water.

*(Authority for term: OAC rule 3745-31-05(A)(3) and 3745-77-07(A)(1))*

- (3) The permittee shall properly install, operate, and maintain a continuous temperature monitor and recorder that measures and records the combustion temperature within the thermal incinerator when the emissions unit(s) is/are in operation, including periods of startup and shutdown. Units shall be in degrees Fahrenheit. The accuracy for each thermocouple, monitor, and recorder shall be guaranteed by the manufacturer to be within  $\pm 1$  percent of the temperature being measured or  $\pm 5$  degrees Fahrenheit, whichever is greater. The temperature monitor and recorder shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and the operating manuals, with any modifications



deemed necessary by the permittee. The permittee shall collect and record the following information each day the emissions unit(s) is/are in operation:

- a. all 3-hour blocks of time, when the emissions unit(s) controlled by the thermal incinerator was/were in operation, during which the average combustion temperature within the thermal incinerator was less than 1450 degrees Fahrenheit or more than 50 degrees Fahrenheit below the average temperature measured during the most recent performance test that demonstrated the emissions unit(s) was/were in compliance; and
- b. a log (date and total time) of the downtime or bypass of the capture (collection) system and thermal incinerator, and/or downtime of the monitoring equipment, when the associated emissions unit(s) was/were in operation.

These records shall be maintained at the facility for a period of three years.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

- (4) Whenever the monitored average combustion temperature within the thermal incinerator deviates from the range or limit established in accordance with this permit, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:
  - a. the date and time the deviation began;
  - b. the magnitude of the deviation at that time;
  - c. the date the investigation was conducted;
  - d. the name(s) of the personnel who conducted the investigation; and
  - e. the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range/limit specified in this permit, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

- f. a description of the corrective action;
- g. the date corrective action was completed;
- h. the date and time the deviation ended;
- i. the total period of time (in minutes) during which there was a deviation;
- j. the temperature readings immediately after the corrective action was implemented; and



- k. the name(s) of the personnel who performed the work.

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

The temperature range/limit is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the permitted temperature range/limit based upon information obtained during future performance tests that demonstrate compliance with the allowable emission rate(s) for the controlled pollutant(s). In addition, approved revisions to the temperature range/limit will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of a minor permit modification.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

- (5) The permittee shall operate and maintain a continuous monitor and recorder which measures the static pressure in the duct downstream of the thermal incinerator while the emissions unit is in operation. The monitoring equipment and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modification deemed necessary by the permittee. Exceedance of the normal operating static pressure range shall require shutdown, investigation of any problems and corrective action to enable operation in the normal range.

The permittee shall maintain monthly records which show the date(s) and time(s) when the static pressure falls below normal operating levels.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

- (6) The permittee shall maintain monthly records of the following information:
- a. the asphalt throughput rates, in tons, for each month;
  - b. the PE/PM10, H<sub>2</sub>S, CO, VOC, and SO<sub>2</sub> emissions, in tons (both process and products of combustion from the thermal incinerator) for each month based on the results of the latest stack test;
  - c. the rolling, 12-month summation of the asphalt monthly throughput rates, in tons; and
  - d. the rolling, 12-month summation of the PE/PM10, H<sub>2</sub>S, CO, VOC, and SO<sub>2</sub> emission rates, in tons (both process and products of combustion from the thermal incinerator).

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

- (7) The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit and any visible emissions of fugitive dust. The presence or



absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

- a. the color of the emissions;
- b. whether the emissions are representative of normal operations;
- c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
- d. the total duration of any visible emissions incident; and
- e. any corrective actions taken to eliminate the visible emissions.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

e) **Reporting Requirements**

- (1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

*(Authority for term: OAC rule 3745-15-03(A))*

- (2) The permittee shall submit quarterly deviation (excursion) reports that identify the following:
  - a. all exceedances of the rolling, 12-month asphalt throughput limitation;
  - b. all exceedances of the rolling, 12-month emissions limitations (both process and products of combustion from the thermal incinerator); and
  - c. all periods of time during which the static pressure in the duct downstream of the thermal incinerator exceeded the normal operating range; and

**Incinerator Requirements**

- d. each period of time (start time and date, and end time and date) when the average combustion temperature within the thermal incinerator was outside of the acceptable range;
- e. any period of time (start time and date, and end time and date) when the emissions unit(s) was/were in operation and the process emissions were not vented to the thermal incinerator;
- f. each incident of deviation described in "e" or "f" (above) where a prompt investigation was not conducted;
- g. each incident of deviation described in "e" or "f" where prompt corrective action, that would bring the emissions unit(s) into compliance and/or the temperature



within the thermal incinerator into compliance with the acceptable range, was determined to be necessary and was not taken; and

- h. each incident of deviation described in “e” or “f” where proper records were not maintained for the investigation and/or the corrective action(s).

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

- (3) The permittee shall submit annual reports that specify the total PE/PM<sub>10</sub>, SO<sub>2</sub>, CO, VOC, and H<sub>2</sub>S emissions from this emissions unit for the previous calendar year. These reports shall be submitted by April 15<sup>th</sup> of each year. This reporting requirement may be satisfied by including and identifying the specific emissions data in the annual Fee Emission Reports.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

- (4) The permittee shall submit semiannual written reports that (a) identify all days during which any visible emissions were observed from the stack serving this emissions unit or any visible emissions of fugitive dust were observed and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the Akron RAQMD) by January 31 and July 31 of each year and shall cover the previous 6-month period.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

f) **Testing Requirements**

- (1) Compliance with the emission limitations in section b)(1) of these terms and conditions shall be determined in accordance with the following methods:

- a. **Emission Limitation:**

Visible PE from the exhaust stack shall not exceed 10% opacity, as a 6-minute average.

**Applicable Compliance Method:**

If required, compliance with the visible PE limitation shall be demonstrated through the results of visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

- b. **Emission Limitations:**

PE/PM<sub>10</sub> shall not exceed 3.05 pounds per hour.

PE/PM<sub>10</sub> shall not exceed 5.69 tons per year, based upon a rolling, 12-month summation.



Applicable Compliance Method:

Compliance with the hourly limitation shall be demonstrated based on the results of stack testing performed in accordance with Methods 1 – 5 of 40 CFR Part 60, Appendix A and the requirements of section f)(2).

Compliance with the annual limitation shall be demonstrated as long as the compliance with the hourly and annual throughput limitations is maintained...

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

c. Emission Limitations:

SO<sub>2</sub> emissions shall not exceed 1.16 pounds per hour.

SO<sub>2</sub> emissions shall not exceed 1.22 tons per year, based upon a rolling, 12-month summation.

Applicable Compliance Method:

If required, compliance with the hourly limitation shall be demonstrated based on the results of stack testing performed in accordance with Methods 1 - 4, and 6 or 6C of 40 CFR Part 60, Appendix A.

Compliance with the annual limitation shall be demonstrated as long as the compliance with the hourly and annual throughput limitations is maintained. *(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

d. Emission Limitations:

CO emissions shall not exceed 0.50 pound per hour.

CO emissions shall not exceed 0.52 ton per year, based upon a rolling, 12-month summation.

Applicable Compliance Method:

If required, compliance with the hourly limitation shall be demonstrated based on the results of stack testing performed in accordance with Methods 1 - 4, and 10 or 10B of 40 CFR Part 60, Appendix A.

Compliance with the annual limitation shall be demonstrated as long as the compliance with the hourly and annual throughput limitations is maintained..

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

e. Emission Limitations:

VOC emissions shall not exceed 19.29 pounds per hour.

VOC emissions shall not exceed 20.16 tons per year, based upon a rolling, 12-month summation.



Applicable Compliance Method:

Compliance with the hourly limitation shall be demonstrated based on the results of stack testing performed in accordance with Methods 1 - 4 and 18 or 25/25A of 40 CFR Part 60, Appendix A and the requirements of section f)(2).

Compliance with the annual limitation shall be demonstrated as long as the compliance with the hourly and annual throughput limitations is maintained..

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

f. Emission Limitations:

H<sub>2</sub>S emissions shall not exceed 0.07 pound per hour.

H<sub>2</sub>S emissions shall not exceed 0.07 tons per year, based upon a rolling, 12-month summation.

Applicable Compliance Method:

If required, compliance with the hourly limitation shall be demonstrated based on the results of stack testing performed in accordance with Methods 1 - 4, and 15 of 40 CFR Part 60, Appendix A.

Compliance with the annual limitation shall be demonstrated as long as the compliance with the hourly and annual throughput limitations is maintained..

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

g. Emission Limitation:

Visible PE of fugitive dust shall not exceed 20% opacity as a 3-minute average.

Applicable Compliance Method:

If required, compliance with the visible fugitive PE limitation shall be demonstrated through the results of visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

(2) 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 12 months prior to the permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate(s) for PE and VOC.

c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):



for PE, Methods 1 through 5 of 40 CFR Part 60, Appendix A; and

for VOC, Methods 1 through 4 and 18 or 25/25A of 40 CFR Part 60, Appendix A.

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

- d. The test(s) shall be conducted while 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. Compliance shall be based on comparing the results of the performance tests to the sum of the allowable emission limitations for the emissions units that vent to the thermal incinerator and were in operation during the performance test.
- e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).
- f. 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.
- g. 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.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3) and 3745-15-04)*

g) Miscellaneous Requirements

- (1) None.



**4. J006, Loading Rack**

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

Cutback Asphalt and Cutback Solvent Loading Rack

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-17-07(B)	Visible particulate emissions (PE) of fugitive dust shall not exceed 20% opacity, as a 3-minute average.
b.	OAC rule 3745-17-08	The permittee shall employ overhead filling of tank trucks to minimize or eliminate fugitive emissions.

(2) Additional Terms and Conditions

a. None.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) None.

e) Reporting Requirements

(1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

*(Authority for term: OAC rule 3745-15-03(A))*



f) Testing Requirements

(1) Compliance with the emission limitations in section b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

Visible PE of fugitive dust shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method:

If required, compliance with the visible PE limitation shall be demonstrated through the results of visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

*(Authority for term: OAC rule 3745-77-07(C)(1))*

g) Miscellaneous Requirements

(1) None.



**5. T009, Asphalt Storage Tank #53**

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

Asphalt Storage Tank #53 - 60,000-gallon heated asphalt storage tank controlled with a thermal incinerator.

- a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.
  - (1) None.
- b) Applicable Emissions Limitations and/or Control Requirements
  - (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-17-07(A)	Visible particulate emissions (PE) from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
b.	OAC rule 3745-17-11(B)	PE shall not exceed 54.27 pounds per hour. (Based on a process weight rate of 134.06 tons per hour and Table I)
c.	OAC rule 3745-21-09(L)(1)	See b)(2)a below.
d.	40 CFR Part 63, Subpart LLLLL	Reduce total hydrocarbon mass emissions by 95%, or to a concentration of 20 ppmv, on a dry basis corrected to 3 percent oxygen; or  route the emissions to a combustion device achieving a combustion efficiency of 99.5%.
e.	40 CFR 63.1 - 15	Table 7 to Subpart LLLLL of 40 CFR Part 63 - Applicability of General Provisions to Subpart LLLLL shows which parts of the General Provisions in 40 CFR 63.1 – 15 apply.
f.	40 CFR Part 60, Subpart Ka	95% reduction of VOC emissions  See b)(2)a below.
g.	40 CFR Part 60, Subpart UU	See b)(2)b below.



(2) Additional Terms and Conditions

- a. The emissions unit shall be equipped with a vapor recovery system which collects all VOC vapors and gases discharged from the storage vessel, and a vapor return or disposal system which is designed to process such VOC vapors and gases so as to reduce their emission to the atmosphere by at least 95 percent by weight.
- b. In accordance with 40 CFR 63.8681(b), asphalt storage tanks subject to the provisions of both 40 CFR 60, Subpart UU and 40 CFR Part 63, Subpart LLLLL are required to comply only with the provisions of 40 CFR Part 63, Subpart LLLLL.

c) Operational Restrictions

- (1) None.

d) Monitoring and/or Recordkeeping Requirements

- (1) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable average combustion temperature within the thermal incinerator, as a 3-hour average when the emissions unit(s) controlled by the thermal incinerator is/are in operation, shall not be less than the average temperature measured during the most recent performance test that demonstrated the emissions unit(s) was/were in compliance.

*(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR 63.8684(b))*

(2) The permittee shall maintain records of the following information:

- 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.

*(Authority for term: OAC rule 3745-77-07(C)(1))*

(3) The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

- a. the color of the emissions;
- b. whether the emissions are representative of normal operations;
- c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;



- d. the total duration of any visible emissions incident; and
- e. any corrective actions taken to eliminate the visible emissions.

*(Authority for term: OAC rule 3745-77-07(C)(1))*

- (4) The permittee shall maintain records of the combustion zone temperature\* data along with the 3-hour averages.

\*[The terms “combustion temperature” and “combustion zone temperature” have identical definitions. “Combustion zone temperature” has been used in instances that the applicable MACT citation is being cited.]

*(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.8694(c))*

- (5) The permittee must install, operate, and maintain each continuous parameter monitoring system (CPMS) according to the following:

- a. the CPMS must complete a minimum of one cycle of operation for each successive 15-minute period;
- b. to determine the 3-hour average, the permittee must:
  - i. have a minimum of four successive cycles of operation to have a valid hour of data;
  - ii. have valid data from at least four equally spaced data values for that hour from a CPMS that is not out-of-control according to the permittee’s site-specific monitoring plan; and
  - iii. determine the 3-hour average of all recorded readings for each operating day, except as stated in section 63.8690(c) (the permittee must have at least two of the three hourly averages for that period using only hourly average values that are based on valid data(i.e., not from out-of-control periods)); and
- c. the permittee must record the results of each inspection, calibration, and validation check.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.8688(a))*

- (6) For each temperature monitoring device the permittee must meet the requirements of section d)(6) and the following:

- a. locate the temperature sensor in a position that provides a representative temperature;
- b. for a non-cryogenic temperature range, use a temperature sensor with a minimum measurement sensitivity of 2.8 degrees C or 1.0 percent of the temperature value, whichever is larger;



- c. if a chart recorder is used, it must have a sensitivity in the minor division of at least 20 degrees F;
- d. perform an accuracy check at least semiannually or following an operating parameter deviation;
  - i. according to the procedures in the manufacturer's documentation; or
  - ii. by comparing the sensor output to redundant sensor output; or
  - iii. by comparing the sensor output to the output from a calibrated temperature measurement device; or
  - iv. by comparing the sensor output to the output from a temperature simulator; and
- e. conduct accuracy checks any time the sensor exceeds the manufacturer's specified maximum operating temperature range or install a new temperature sensor; and
- f. at least quarterly or following an operating parameter deviation, perform visual inspections of components if redundant sensors are not used.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.8688(b))*

- (7) As an option to installing the CPMS specified in section d)(6) the permittee may install a continuous emissions monitoring system (CEMS) or a continuous opacity monitoring system (COMS) that meets the requirements specified in 40 CFR 63.8 and the applicable performance specifications of 40 CFR Part 60, Appendix B.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.8688(f))*

- (8) For each monitoring system the permittee must develop and make available for inspection by the permitting authority, upon request, a site-specific monitoring plan that addresses the following:
  - a. installation of the CPMS, CEMS, or COMS sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (i.e., on or downstream of the last control device);
  - b. performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction system; and
  - c. performance evaluation procedures and acceptance criteria (i.e., calibrations).

*(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.8688(g))*



- (9) The site-specific monitoring plan must also address the following:
- a. ongoing operation and maintenance procedures in accordance with general requirements of sections 40 CFR 63.8(c)(1), (c)(3), (c)(4)(ii), (c)(7), and (c)(8);
  - b. ongoing data quality assurance procedures in accordance with the general requirements of section 40 CFR 63.8(d); and
  - c. ongoing record keeping and reporting procedures in accordance with the general requirements of sections 40 CFR 63.10(c), (e)(1), and (e)(2)(i).

*(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.8688(h))*

- (10) The permittee must conduct a performance evaluation of each CPMS, CEMS, or COMS in accordance with the site-specific monitoring plan.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.8688(i))*

- (11) The permittee must operate and maintain the CPMS, CEMS, or COMS in continuous operation according to the site-specific monitoring plan.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.8688(j))*

- (12) The permittee shall maintain a record of the petroleum liquid stored, the period of storage, and the maximum true vapor pressure of the liquid during the respective storage period.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 60.115a(a))*

e) Reporting Requirements

- (1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

*(Authority for term: OAC rule 3745-15-03(A))*

- (2) The permittee shall submit quarterly deviation (excursion) reports that identify the following:

- a. each period of time (start time and date, and end time and date) when the average combustion temperature within the thermal incinerator was outside of the acceptable range;
- b. any period of time (start time and date, and end time and date) when the emissions unit(s) was/were in operation and the process emissions were not vented to the thermal incinerator;
- c. each incident of deviation described in "a" or "b" (above) where a prompt investigation was not conducted;



- d. each incident of deviation described in “a” or “b” where prompt corrective action, that would bring the emissions unit(s) into compliance and/or the temperature within the thermal incinerator into compliance with the acceptable range, was determined to be necessary and was not taken; and
- e. each incident of deviation described in “a” or “b” where proper records were not maintained for the investigation and/or the corrective action(s).

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

- (3) The permittee shall submit semiannual written reports that (a) identify all days during which any visible emissions were observed from the stack serving this emissions unit or any visible emissions of fugitive dust were observed and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the Akron RAQMD) by January 31 and July 31 of each year and shall cover the previous 6-month period.

*(Authority for term: OAC rule 3745-77-07(C)(1))*

- (4) The permittee shall submit compliance reports that contain the information required by 40 CFR 63.8693(c). The reports shall cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31. The compliance reports must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.8693(b)(3) & (b)(4))*

f) **Testing Requirements**

- (1) Compliance with the emission limitations in section b)(1) of these terms and conditions shall be determined in accordance with the following methods:

- a. **Emission Limitation:**

Visible PE from any stack shall not exceed 20% opacity, as a 6-minute average.

**Applicable Compliance Method:**

If required, compliance with the visible PE limitation shall be demonstrated through the results of visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

*(Authority for term: OAC rule 3745-77-07(C)(1))*

- b. **Emission Limitation:**

PE shall not exceed 54.27 pounds per hour.



Applicable Compliance Method:

If required, compliance with the PE limitation shall be demonstrated through the results of stack testing performed in accordance with Methods 1 - 5 of 40 CFR Part 60, Appendix A.

*(Authority for term: OAC rule 3745-77-07(C)(1))*

c. Emission Limitation:

Reduce total hydrocarbon mass emissions by 95%, or to a concentration of 20 ppmv, on a dry basis corrected to 3 percent oxygen; or

route the emissions to a combustion device achieving a combustion efficiency of 99.5%.

Applicable Compliance Method:

To determine compliance with the total hydrocarbon percent reduction standard, use Equations 3 and 4 of this section as follows:

$$RE = [ (Mthci - Mthco) / (Mthci) ] * 100 \quad (\text{Eq. 3})$$

Where:

RE = Emission reduction efficiency, percent;

Mthci = Mass flow rate of total hydrocarbons entering the control device, kilograms per hour, determined using Equation 4; and

Mthco = Mass flow rate of total hydrocarbons exiting the control device, kilograms per hour, determined using Equation 4.

$$Mthc = C * Q * K \quad (\text{Eq. 4})$$

Where:

Mthc = Total hydrocarbon emission rate, kilograms per hour;

C = Concentration of total hydrocarbons on a dry basis, parts per million by volume (ppmv), as measured by the test method specified in Table 3 of 40 CFR Part 63, Subpart LLLLLL; and

Q = Vent gas stream flow rate (dscmm) at a temperature of 20 degrees C as measured by the test method specified in Table 3 of 40 CFR Part 63, Subpart LLLLLL; and

K = Unit conversion constant (3.00E-05) (ppmv)<sup>-1</sup> (gram-mole / standard cubic meter) (kilogram / gram) (minutes / hour), where standard temperature for gram-mole/standard cubic meter is 20 degrees C.



To determine compliance with the combustion efficiency standard, Equation 5 of this section must be used, as follows:

$$CE = [ 1 - (CO / CO_2) - (THC / CO_2) ] \quad (\text{Eq. 5})$$

Where:

CE = Combustion efficiency, percent;

CO = Carbon monoxide concentration at the combustion device outlet, in parts per million by volume (dry), as measured by the test method specified in Table 3 of 40 CFR Part 63, Subpart LLLLL;

CO<sub>2</sub> = Carbon dioxide concentration at the combustion device outlet, in parts per million by volume (dry), as measured by the test method specified in Table 3 of 40 CFR Part 63, Subpart LLLLL; and

THC = Total hydrocarbon concentration at the combustion device outlet, in parts per million by volume (dry), as measured by the test method specified in Table 3 of 40 CFR Part 63, Subpart LLLLL.

To determine compliance with the total hydrocarbon destruction efficiency standard for a combustion device that does not use auxiliary fuel, Equation 6 of this section must be used, as follows:

$$THC\ DE = [ (CO + CO_2) / (CO + CO_2 + THC) ] \quad (\text{Eq. 6})$$

Where

THC DE = THC destruction efficiency, percent;

CO = Carbon monoxide concentration at the combustion device outlet, in parts per million by volume (dry), as measured by the test method specified in Table 3 of 40 CFR Part 63, Subpart LLLLL;

CO<sub>2</sub> = Carbon dioxide concentration at the combustion device outlet, in parts per million by volume (dry), as measured by the test method specified in Table 3 of 40 CFR Part 63, Subpart LLLLL; and

THC = Total hydrocarbon concentration at the combustion device outlet, in parts per million by volume (dry), as measured by the test method specified in Table 3 of 40 CFR Part 63, Subpart LLLLL.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.8687(e))*

- (2) The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
  - a. The emission testing for hydrocarbon/combustion efficiency shall be conducted within 12 months prior to the permit expiration.



- b. The emission testing shall be conducted to demonstrate compliance with the total hydrocarbon/combustion efficiency requirements.
- c. The following test method(s) shall be employed to demonstrate compliance with the total hydrocarbon/combustion efficiency requirements:

The test methods included in Table 3 of 40 CFR Part 63, Subpart LLLLLL.

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. Compliance shall be based on comparing the results of the performance tests to the sum of the allowable emission limitations for the emissions units that vent to the thermal incinerator and were in operation during the performance test.
- e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).
- f. 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.
- g. 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.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-15-04)*

- g) Miscellaneous Requirements
  - (1) None.



**6. T034, Asphalt Storage Tank #45**

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

Asphalt Storage Tank #45 - 1,700,000-gallon storage tank controlled with Fiber Bed Filter "F"

- a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.
  - (1) None.
- b) Applicable Emissions Limitations and/or Control Requirements
  - (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)  (PTI 16-01935, as effective 08/25/99)	Particulate emissions (PE) shall not exceed 0.34 ton per year.  Carbon monoxide (CO) emissions shall not exceed 0.55 ton per year.  Volatile organic compound emissions shall not exceed 11.95 ton per year.
b.	OAC rule 3745-17-07(A)	The visible emission limitation based on this rule is less stringent than the limit established pursuant to 40 CFR Part 63, Subpart LLLLL.
c.	OAC rule 3745-17-11(B)	PE shall not exceed 54.46 pounds per hour. (Based on a process weight rate of 136.58 tph and Table I)
d.	OAC rule 3745-21-09(L)(1)	Exempt.  Asphalt has a vapor pressure less than 1.52 pounds per square inch absolute.
e.	40 CFR Part 60, Subpart Kb	Exempt.  Tank capacity greater than or equal to 151 m <sup>3</sup> (39,890 gal) and stores a liquid with a maximum true vapor pressure less than 3.5 kPa (0.51 psia).
f.	40 CFR Part 63, Subpart LLLLL	0% opacity for exhaust gases, except for one consecutive 15-minute period in any 24-hour period when the storage tank transfer lines are being cleaned.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
g.	40 CFR 63.1 - 15	Table 7 to Subpart LLLLL of 40 CFR Part 63 - Applicability of General Provisions to Subpart LLLLL shows which parts of the General Provisions in 40 CFR 63.1 – 15 apply.
h.	40 CFR Part 60, Subpart UU	See b)(2)b.

(2) Additional Terms and Conditions

- a. The emissions from this emissions unit shall be vented to the fiber bed filter at all times the emissions unit is in operation.
- b. In accordance with 40 CFR 63.8681(b), asphalt storage tanks subject to the provisions of both 40 CFR 60, Subpart UU and 40 CFR Part 63, Subpart LLLLL are required to comply only with the provisions of 40 CFR Part 63, Subpart LLLLL.

c) Operational Restrictions

d) Monitoring and/or Recordkeeping Requirements

- (1) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable range established for the pressure drop across the fiber bed filter is between 0.1 to 16.5 inches of water.

*(Authority for term: OAC rule 3745-77-07(A)(1) and 3745-31-05(A)(3))*

- (2) The permittee shall properly install, operate, and maintain equipment to continuously monitor the pressure drop, in inches of water, across the fiber bed filter when the controlled emissions unit(s) is/are in operation, including periods of startup and shutdown. The permittee shall record the pressure drop across the fiber bed filter on a daily basis. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer’s recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee.

Whenever the monitored value for the pressure drop deviates from the limit or range established in accordance with this permit, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:

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



- e. the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified in this permit, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

- f. a description of the corrective action;
- g. the date corrective action was completed;
- h. the date and time the deviation ended;
- i. the total period of time (in minutes) during which there was a deviation;
- j. the pressure drop readings immediately after the corrective action was implemented; and
- k. the name(s) of the personnel who performed the work.

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

This range or limit on the pressure drop across the fiber bed filter is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the permitted limit or range for the pressure drop based upon information obtained during future testing that demonstrate compliance with the allowable particulate emission rate for the controlled emissions unit(s). In addition, approved revisions to the range or limit will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of a minor permit modification.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

- (3) The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
  - a. the color of the emissions;
  - b. whether the emissions are representative of normal operations;
  - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;



- d. the total duration of any visible emissions incident; and
- e. any corrective actions taken to eliminate the visible emissions.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

- (4) The permittee shall maintain records of the following information for the fixed roof tank:
  - a. the types of petroleum liquids stored in the tank; and
  - b. the maximum true vapor pressure (in pounds per square inch absolute), as stored, of each liquid that has a maximum true vapor pressure greater than 1.0 pound per square inch absolute.

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

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

e) Reporting Requirements

- (1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

*(Authority for term: OAC rule 3745-15-03(A))*

- (2) The permittee shall submit quarterly deviation (excursion) reports that identify the following:
  - a. each period of time (start time and date, and end time and date) when the pressure drop across the fiber bed filter was outside of the acceptable range;
  - b. any period of time (start time and date, and end time and date) when the emissions unit(s) was/were in operation and the process emissions were not vented to the fiber bed filter;
  - c. each incident of deviation described in "a" (above) where a prompt investigation was not conducted;
  - d. each incident of deviation described in "a" where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and
  - e. each incident of deviation described in "a" where proper records were not maintained for the investigation and/or the corrective action(s), as identified in the monitoring and record keeping requirements of this permit.

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*



- (3) The permittee shall submit semiannual written reports that identify:
- a. all days during which any visible particulate emissions were observed from the stack serving this emissions unit; and
  - b. any corrective actions taken to minimize or eliminate the visible particulate emissions.

These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

- (4) The permittee shall submit compliance reports that contain the information required by 40 CFR 63.8693(c). The reports shall cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31. The compliance reports must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3) and 40 CFR 63.8693(b)(3) & (b)(4))*

- (5) The permittee shall notify the Director (the Akron RAQMD) within 30 days when the maximum true vapor pressure of the liquid equals or exceeds 3.5 kPa (0.51 psia).

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

f) Testing Requirements

- (1) Compliance with the emission limitations in section b)(1) of these terms and conditions shall be determined in accordance with the following methods:

- a. Emission Limitation:

Visible PE shall not exceed 0% opacity.

Applicable Compliance Method:

If required, compliance with the visible PE limitation shall be demonstrated through the results of visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

- b. Emission Limitation:

PE shall not exceed 54.46 pounds per hour.



Applicable Compliance Method:

If required, compliance with the PE limitation shall be demonstrated through the results of stack testing performed in accordance with Methods 1 - 5 of 40 CFR Part 60, Appendix A.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

c. Emission Limitation:

PE shall not exceed 0.34 ton per year.

Applicable Compliance Method:

Compliance with the PE limitation shall be determined as specified in the document entitled "Asphalt Tank 45 Calculations" submitted with the Permit To Install application number 16-01935.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

d. Emission Limitation:

CO shall not exceed 0.55 ton per year.

Applicable Compliance Method:

Compliance with the CO limitation shall be determined as specified in the document entitled "Asphalt Tank 45 Calculations" submitted with the Permit To Install application number 16-01935.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

e. Emission Limitation:

VOC shall not exceed 11.95 ton per year.

Applicable Compliance Method:

Compliance with the VOC limitation shall be determined as specified in the document entitled "Asphalt Tank 45 Calculations" submitted with the Permit To Install application number 16-01935.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

g) Miscellaneous Requirements

(1) None.



**7. Emissions Unit Group –Asphalt Filler Mixer Group: P907 and P917**

EU ID	Operations, Property and/or Equipment Description
P907	Asphalt Filler Mixer #2 - Filler mixer for the strip (4-Wide) roofing line controlled by Coater #2 fiber bed filter
P917	Asphalt Filler Mixer #1 - Filler mixer for the laminated (3-Wide) roofing line controlled by Coater #1 fiber bed filter

- a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.
- (1) None.
- b) Applicable Emissions Limitations and/or Control Requirements
- (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)  (PTI P0106755, as effective 9/14/10)	Particulate emissions (PE/PM10) shall not exceed 0.27 pounds per hour (stack emissions). (P907)  Volatile organic compound (VOC) emissions shall not exceed 11.12 pounds per hour. (P907)  Carbon monoxide (CO) emissions shall not exceed 0.47 pound per hour. (P907)
b.	OAC rule 3745-31-05(A)(3)  (P0106752, as effective 9/23/10)	Particulate emissions (PE/PM10) shall not exceed 0.19 pounds per hour (stack emissions). (P917)  Volatile organic compound (VOC) emissions shall not exceed 7.8 pounds per hour. (P917)  Carbon monoxide (CO) emissions shall not exceed 0.33 pound per hour. (P917)  Visible PE from any stack shall not exceed 10% opacity as a 6-minute average. (P917)



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		Visible PE of fugitive dust shall not exceed 10% opacity as a 3-minute average. (P917)
c.	OAC rule 3745-17-07(A)	<p>Visible PE from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule. (P907)</p> <p>The emission limitations specified by these rules are less stringent than the emissions limitations established pursuant to OAC rule 3745-31-05(A)(3). (P917)</p>
d.	OAC rule 3745-17-07(B)	<p>Visible PE of fugitive dust shall not exceed 20% opacity, as a 3-minute average. (P907)</p> <p>The emission limitations specified by these rules are less stringent than the emissions limitations established pursuant to OAC rule 3745-31-05(A)(3). (P917)</p>
e.	OAC rule 3745-17-11(B)	The emission limitations specified by these rules are less stringent than the emissions limitations established pursuant to OAC rule 3745-31-05(A)(3).
f.	OAC rule 3745-17-08(B)	The filler mixers shall be adequately enclosed and vented to a fiber bed filter.
g.	OAC rules 3745-31-13 through 3745-31-20	<p>The emissions per rolling, 12-month period from P917 shall not exceed:</p> <p>VOC - 23.89 tons per year; and CO - 1.06 tons per year.</p> <p>See c)(1) below.</p>
h.	OAC rule 3745-31-05(D)	<p>The emissions per rolling, 12-month period from P917 shall not exceed:</p> <p>PE/PM10 - 0.61 tons per year.</p> <p>See c)(1) below.</p>
i.	40 CFR Part 63, Subpart LLLLL	Limit total PE from the coater, coating mixer, sealant applicator, and adhesive applicator on the 3-Wide Roofing Line to 0.04 kilogram of particulate per megagram (kg/Mg) (0.8 lb/ton) of asphalt shingle or mineral-surfaced roll roofing



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		produced.  See c)(2)-(3), d)(3) through d)(12), and e)(5) below.

(2) Additional Terms and Conditions

a. The emissions from this emissions unit shall be vented to the fiber bed filter at all times the emissions unit is in operation.

c) Operational Restrictions

(1) The maximum throughput and production on the laminated (3-Wide) roofing line shall not exceed 96,911.2 tons of asphalt and 492,080.4 tons of shingle production on a rolling 12-month summation. The permittee has existing operation records and therefore does not need to be limited to first year monthly throughput and production amounts.

*(Authority for term: OAC rule 3745-77-07(A)(1) and 3745-31-05(A)(3))*

d) Monitoring and/or Recordkeeping Requirements

(1) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable range established for the pressure drop across the fiber bed filter(s), as a 3-hour average when the emission unit(s) is/are in operation, shall not be more than 7.9 inches of water for Coater #2 fiber bed filter (P907), 5.6 inches of water for Coater #1 fiber bed filter (P917), or the pressure drop established during the most recent performance test that demonstrated the emission unit(s) was/were in compliance.

*(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR 63.6864(b))*

(2) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable average inlet gas temperature, as a 3-hour average when the emissions unit(s) is/are in operation, shall not be more than 115 degrees Fahrenheit for the Coater #2 fiber bed filter (P907) and 102.4 degrees Fahrenheit for the Coater #1 fiber bed filter (P917), or the temperature established during the most recent performance test that demonstrated the emissions unit(s) was/were in compliance.

*(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR 63.8684(b))*

(3) The permittee shall maintain monthly records of the following information for P917:

- a. the asphalt throughput and shingle production rate, in tons, for each month;
- b. the PE/PM10, CO, and VOC emissions, in tons, for each month based upon the results of the latest stack test;
- c. the rolling, 12-month summation of the asphalt throughput and shingle production rates, in tons; and



- d. the rolling, 12-month summation of the PE/PM<sub>10</sub>, CO, and VOC emissions, in tons.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

- (4) The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions of fugitive dust and visible emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
  - a. the color of the emissions;
  - b. whether the emissions are representative of normal operations;
  - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
  - d. the total duration of any visible emissions incident; and
  - e. any corrective actions taken to eliminate the visible emissions.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

- (5) The permittee shall maintain records of the inlet gas temperature and pressure drop data along with the 3-hour averages of the inlet gas temperature and pressure drop.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.8694(c))*

- (6) The permittee must install, operate, and maintain each continuous parameter monitoring system (CPMS) according to the following:
  - a. the CPMS must complete a minimum of one cycle of operation for each successive 15-minute period;
  - b. to determine the 3-hour average, the permittee must:
    - i. have a minimum of four successive cycles of operation to have a valid hour of data;
    - ii. have valid data from at least four equally spaced data values for that hour from a CPMS that is not out-of-control according to the permittee's site-specific monitoring plan; and
    - iii. determine the 3-hour average of all recorded readings for each operating day, except as stated in section 63.8690(c) (the permittee must have at least two of the three hourly averages for that period using only hourly average values that are based on valid data (i.e., not from out-of-control periods)); and



- c. the permittee must record the results of each inspection, calibration, and validation check.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.8688(a))*

- (7) For each temperature monitoring device, the permittee must meet the requirements of section d)(5) and the following:

- a. locate the temperature sensor in a position that provides a representative temperature;
- b. for a non-cryogenic temperature range, use a temperature sensor with a minimum measurement sensitivity of 2.8 degrees C or 1.0 percent of the temperature value, whichever is larger;
- c. if a chart recorder is used, it must have a sensitivity in the minor division of at least 20 degrees F;
- d. perform an accuracy check at least semiannually or following an operating parameter deviation;
  - i. according to the procedures in the manufacturer's documentation; or
  - ii. by comparing the sensor output to redundant sensor output; or
  - iii. by comparing the sensor output to the output from a calibrated temperature measurement device; or
  - iv. by comparing the sensor output to the output from a temperature simulator; and
- e. conduct accuracy checks any time the sensor exceeds the manufacturer's specified maximum operating temperature range or install a new temperature sensor; and
- f. at least quarterly or following an operating parameter deviation, perform visual inspections of components if redundant sensors are not used.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.8688(b))*

- (8) For each pressure measurement device, the permittee must meet the requirements of section d)(5) and the following:

- a. locate the pressure sensor(s) in, or as close as possible to, a position that provides a representative measurement of the pressure;
- b. use a gauge with a minimum measurement sensitivity of 0.12 kilopascals or a transducer with a minimum measurement sensitivity of 5 percent of the pressure range;



- c. check pressure tap pluggage daily, and perform an accuracy check at least quarterly or following an operating parameter deviation:
  - i. according to the procedures in the manufacturer's documentation; or
  - ii. by comparing the sensor to redundant sensor output;
- d. conduct calibration checks any time the sensor exceeds the manufacturer's specified maximum operating pressure range or install a new sensor;
- e. at least monthly or following an operating parameter deviation, perform a leak check of all components for integrity, all electrical connections for continuity, and all mechanical connections for leakage; and
- f. at least quarterly or following an operating parameter deviation, perform visible inspections on all components if redundant sensors are not used.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.8688(c))*

- (9) For monitoring parameters other than temperature and pressure drop, the permittee must install and operate a CPMS to provide representative measurements of the monitored parameters.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.8688(d))*

- (10) As an option to installing the CPMS specified in section d)(5), the permittee may install a continuous emissions monitoring system (CEMS) or a continuous opacity monitoring system (COMS) that meets the requirements specified in 40 CFR 63.8 and the applicable performance specifications of 40 CFR Part 60, Appendix B.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.8688(f))*

- (11) For each monitoring system, the permittee must develop and make available for inspection by the permitting authority, upon request, a site-specific monitoring plan that addresses the following:

- a. installation of the CPMS, CEMS, or COMS sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (i.e., on or downstream of the last control device);
- b. performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction system; and
- c. performance evaluation procedures and acceptance criteria (i.e., calibrations).

*(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.8688(g))*



- (12) The site-specific monitoring plan must also address the following:
- a. ongoing operation and maintenance procedures in accordance with general requirements of sections 40 CFR 63.8(c)(1), (c)(3), (c)(4)(ii), (c)(7), and (c)(8);
  - b. ongoing data quality assurance procedures in accordance with the general requirements of section 40 CFR 63.8(d); and
  - c. ongoing record keeping and reporting procedures in accordance with the general requirements of sections 40 CFR 63.10(c), (e)(1), and (e)(2)(i).

*(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.8688(h))*

- (13) The permittee must conduct a performance evaluation of each CPMS, CEMS, or COMS in accordance with the site-specific monitoring plan.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.8688(ii))*

- (14) The permittee must operate and maintain the CPMS, CEMS, or COMS in continuous operation according to the site-specific monitoring plan.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.8688(j))*

e) Reporting Requirements

- (1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

*(Authority for term: OAC rule 3745-15-03(A))*

- (2) The permittee shall submit quarterly deviation (excursion) reports that identify the following:

- a. For P917, all exceedances of the rolling, 12-month asphalt throughput and shingle production limitations; and
- b. For P917, all exceedances of the rolling, 12-month PE/PM10, CO, and VOC emission limitations.

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

- (3) The permittee shall submit annual reports that specify the total PE/PM10, CO, and VOC emissions from P917 for the previous calendar year. These reports shall be submitted by April 15<sup>th</sup> of each year. This reporting requirement may be satisfied by including and identifying the specific emissions data in the annual Fee Emission Reports.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*



- (4) The permittee shall submit semiannual written reports that (a) identify all days during which any visible emissions were observed from the stacks serving these emissions units or any visible emissions of fugitive dust were observed and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the Akron RAQMD) by January 31 and July 31 of each year and shall cover the previous 6-month period.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

- (5) The permittee shall submit compliance reports that contain the information required by 40 CFR 63.8693(c). The reports shall cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31. The compliance reports must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.8693(b)(3) and (b)(4))*

f) Testing Requirements

- (1) Compliance with the emission limitations in section b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

Visible PE from any stack shall not exceed 10% opacity, as a 6-minute average.  
(P917)

Visible PE from any stack shall not exceed 20% opacity, as a 6-minute average.  
(P907)

Applicable Compliance Method:

If required, compliance with the visible PE limitation shall be demonstrated through the results of visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

b. Emission Limitation:

Visible PE of fugitive dust shall not exceed 10% opacity, as a 3-minute average.  
(P917)

Visible PE of fugitive dust shall not exceed 20% opacity, as a 3-minute average.  
(P907)



Applicable Compliance Method:

If required, compliance with the visible PE limitation shall be demonstrated through the results of visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

c. Emission Limitations:

PE/PM10 shall not exceed 0.19 pounds per hour (stack emissions). (P917)

PE/PM10 shall not exceed 0.27 pounds per hour (stack emissions). (P907)

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly limitation based on the results of emission testing conducted in accordance with Methods 1 - 5, of 40 CFR Part 60, Appendix A [see section f)(2)].

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

d. Emission Limitations:

VOC emissions shall not exceed 7.8 pounds per hour. (P917)

VOC emissions shall not exceed 11.12 pounds per hour. (P907)

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly limitation based on the results of emission testing conducted in accordance with Methods 1 - 4 and 18 or 25/25A of 40 CFR Part 60, Appendix A [see section f)(2)].

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

e. Emission Limitations:

CO emissions shall not exceed 0.33 pound per hour. (P917)

CO emissions shall not exceed 0.47 pound per hour. (P907)

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with the hourly limitation based on the results of emission testing conducted in accordance with Methods 1 - 4 and 10 or 10B of 40 CFR Part 60, Appendix A.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*



f. Emission Limitations:

24.89 tons per year VOC, based upon a rolling, 12-month summation (P917)

1.06 tons per year CO, based upon a rolling, 12-month summation (P917)

0.61 tons per year PE/PM10, based upon a rolling, 12-month summation (P917)

Applicable Compliance Method:

Compliance with the rolling 12-month summation shall be demonstrated as long as compliance with the rolling, 12-month production/throughput limitation is maintained.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

g. Emission Limitation:

total PE from the coater, coating mixer, sealant applicator, and adhesive applicator on the 3-Wide Roofing Line shall be limited to 0.04 kilogram of particulate per megagram (kg/Mg) (0.8 lb/ton) of asphalt shingle or mineral-surfaced roll roofing produced.

Applicable Compliance Method:

To determine compliance with the particulate emission rate, use Equations 1 and 2 as follow:

$$E = Mpm / P \quad (\text{Eq. 1})$$

Where:

E = Particulate emissions, kilograms of particulate per megagram of roofing product manufactured;

Mpm = Particulate hourly emission rate, kilograms per hour, determined using Equation 2; and

P = The asphalt roofing product manufacturing rate during the emissions sampling period, including and material trimmed from the final product, megagram per hour.

$$Mpm = C * Q * K \quad (\text{Eq. 2})$$

Where:

Mpm = Particulate hourly emission rate, kilograms per hour;

C = concentration of particulate on a dry basis, grams per dry standard cubic meter (g/dscm), as measured by the test method specified in Table 3 of 40 CFR 63, Subpart LLLLLL;



Q = Vent gas steam flow rate (dry standard cubic meters per minute) at a temperature of 20 degrees C, as measure by the test method specified in Table 3 of 40 CFR 63, Subpart LLLLLL;

K = Unit conversion constant (0.06 minute-kilogram / hour-gram).

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

(2) 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 12 months prior to the permit expiration.
- b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for PE/PM10 and VOC.
- c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

for PE, the test methods included in Table 3 of 40 CFR Part 63, Subpart LLLLLL; and

for VOC, Methods 1 through 4 and 18 or 25/25A, as appropriate, of 40 CFR Part 60, Appendix A.

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

- d. The test(s) shall be conducted while 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. Compliance for each emission unit shall be based on comparing the results of the performance tests to the sum of the allowable emission limitations for the emissions units that vent to the fiber bed filters and were in operation during the performance test.
- e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).
- f. 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.



- g. 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.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

g) Miscellaneous Requirements

- (1) None.



**8. Emissions Unit Group -Coater Group: P906 and P908**

EU ID	Operations, Property and/or Equipment Description
P906	Asphalt Coater/Surge Tank #1 controlled with Coater #1 fiber bed filter (serves 3-wide roofing line)
P908	Asphalt Coater/Surge Tank #2 controlled with Coater #2 fiber bed filter (serves 4-wide roofing line)

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)  (P0108315, as effective 07/05/11, <b>P906</b> )  (PTI 16-02347, as effective 08/16/05, <b>P908</b> )	Visible particulate emissions (PE) from any stack shall not exceed 10% opacity, as a 6-minute average.  Visible emissions of fugitive dust shall not exceed 10% opacity as a 3-minute average.  <b>For P906:</b>  PE/PM10 shall not exceed 2.60 pounds per hour, and 11.4 tons per year.  Volatile organic compound (VOC) emissions shall not exceed 4.62 pounds per hour, and 20.3 tons per year.  Carbon monoxide (CO) emissions shall not exceed 5.51 pounds per hour, and 24.2 tons per year.  See c)(1) below.  <b>For P908:</b>



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		PE/PM10 shall not exceed 3.70 pounds per hour.  H2S emissions shall not exceed 0.26 pound per hour.  VOC emissions shall not exceed 6.59 pounds per hour.  CO emissions shall not exceed 7.86 pounds per hour.  SO2 emissions shall not exceed 0.25 pound per hour.
b.	OAC rule 3745-17-07(A) OAC rule 3745-17-11(B)	The mass/visible emission limitations specified by these rules are less stringent than the limitations established pursuant to OAC rule 3745-31-05(A)(3).
c.	OAC rule 3745-17-08(B)	Each coater shall be adequately enclosed and vented to a fiber bed filter.
d.	OAC rules 3745-31-13 through 3745-31-20	The emissions per rolling 12-month summation shall not exceed:  <b>For P908:</b>  VOC - 25.16 tons per year; CO - 30.01 tons per year; and SO2 - 1.00 tons per year.  See c)(1) and c)(2) below.
e.	OAC rule 3745-31-05(D)	The emissions per rolling, 12-month summation shall not exceed:  <b>For P908:</b>  PE/PM10 - 14.15 tons per year; and H2S - 1.03 tons per year.  See c)(1) and c)(2) below.
f.	40 CFR Part 63, Subpart LLLLLL	Limit total PE from the coater, coating mixer, sealant applicator, and adhesive applicator on the 3-Wide and 4-Wide roofing lines to 0.04 kilogram emissions per megagram (kg/Mg) (0.08 pound per ton, lb/ton) of asphalt shingle or mineral-surfaced roll roofing produced.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		See b)(2)b.
g.	40 CFR Part 63, Subpart JJJJ	Limit organic HAP emissions to the following:  no more than 4 percent of the mass of coating materials applied for each month; or  no more than 20 percent of the mass of coating solids applied for each month.
h.	40 CFR 63.1-15	Table 7 to Subpart LLLLL of 40 CFR Part 63 - Applicability of General Provisions to Subpart LLLLL shows which parts of the General Provisions in 40 CFR 63.1 - 15 apply.  Table 2 to Subpart JJJJ of 40 CFR Part 63 - Applicability of General Provisions to Subpart JJJJ shows which parts of the General Provisions in 40 CFR 63.1 - 15 apply.
i.	40 CFR Part 60, Subpart UU	See b)(2)c below.
j.	OAC rule 3745-21-07	Exempt.  Asphalt is not a photochemically reactive material, as defined in OAC rule 3745-21-01(C)(5).  See b)(2)d below.

(2) Additional Terms and Conditions

- a. The emissions from this emissions unit shall be vented to the fiber bed filter at all times the emissions unit is in operation.
- b. The opacity limitations established pursuant to 40 CFR Part 63, Subpart LLLLL are less stringent than the restriction pursuant to OAC rule 3745-31-05(A)(3).
- c. In accordance with 40 CFR 63.8681(b), coaters subject to the provisions of both 40 CFR 60, Subpart UU and 40 CFR Part 63, Subpart LLLLL are required to comply only with the provisions of 40 CFR Part 63, Subpart LLLLL.
- d. On February 18, 2008, OAC rule 3745-21-07 was revised in its entirety, therefore, the 21-07 rule that was in effect prior to this date is no longer part of the State requirements. On April 4, 2008, the rule revision was submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP); however, until



the U.S. EPA approves the revision to OAC rule 3745-21-07, the requirement to comply with the previous 21-07 rule provisions still exists as part of the federally-approved SIP for Ohio.

c) Operational Restrictions

- (1) The maximum throughput and production on the laminated (3-Wide) roofing line shall not exceed 96,911.2 tons of asphalt throughput and 492,080.4 tons of shingle production, based on rolling, 12-month summations. The permittee has existing operation records and, therefore, does not need to be limited to the first year monthly throughputs.

*(Authority for term: OAC rule 3745-77-07(A)(1) and 3745-31-05(A)(3))*

- (2) The maximum throughput and production on the non-laminated (4-Wide) roofing line shall not exceed 165,325.1 tons of asphalt throughput and 797,115.0 tons of shingle production, based on rolling, 12-month summations. The permittee has existing operation records and, therefore, does not need to be limited to the first year monthly throughputs.

*(Authority for term: OAC rule 3745-77-07(A)(1) and 3745-31-05(A)(3))*

d) Monitoring and/or Recordkeeping Requirements

- (1) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable range established for the pressure drop across the fiber bed filters, as a 3-hour average when the emission unit(s) is/are in operation, shall not be more than 5.6 inches of water for Coater #1 fiber bed filter (P906) and 7.9 inches of water for Coater #2 fiber bed filter (P908), or the pressure drop established during the most recent performance test that demonstrated the emission unit(s) was/were in compliance.

*(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR 63.6864(b))*

- (2) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable average inlet gas temperature to the fiber bed filters, as a 3-hour average when the emissions unit(s) is/are in operation, shall not be more 102.4 degrees Fahrenheit for Coater #1 fiber bed filter (P906) and 115 degrees Fahrenheit for Coater #2 fiber bed filter (P908) or the temperature established during the most recent performance test that demonstrated the emissions unit(s) was/were in compliance.

*(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR 63.8684(b))*

- (3) The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions of fugitive dust and visible emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

- a. the color of the emissions;
- b. whether the emissions are representative of normal operations;



- c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
- d. the total duration of any visible emissions incident; and
- e. any corrective actions taken to eliminate the visible emissions.

*(Authority for term: OAC rule 3745-77-07(A)(1) and 3745-31-05(A)(3))*

- (4) The permittee shall maintain records of the inlet gas temperature and pressure drop data along with the 3-hour averages of the inlet gas temperature and pressure drop.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.8694(c))*

- (5) The permittee must install, operate, and maintain each continuous parameter monitoring system (CPMS) according to the following:

- a. the CPMS must complete a minimum of one cycle of operation for each successive 15-minute period;
- b. to determine the 3-hour average, the permittee must:
  - i. have a minimum of four successive cycles of operation to have a valid hour of data;
  - ii. have valid data from at least four equally spaced data values for that hour from a CPMS that is not out-of-control according to the permittee's site-specific monitoring plan; and
  - iii. determine the 3-hour average of all recorded readings for each operating day, except as stated in section 63.8690(c) (the permittee must have at least two of the three hourly averages for that period using only hourly average values that are based on valid data (i.e., not from out-of-control periods)); and
- c. the permittee must record the results of each inspection, calibration, and validation check.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.8688(a))*

- (6) For each temperature monitoring device, the permittee must meet the requirements of section d)(4) and the following:

- a. locate the temperature sensor in a position that provides a representative temperature;
- b. for a non-cryogenic temperature range, use a temperature sensor with a minimum measurement sensitivity of 2.8 degrees C or 1.0 percent of the temperature value, whichever is larger;



- c. if a chart recorder is used, it must have a sensitivity in the minor division of at least 20 degrees F;
- d. perform an accuracy check at least semiannually or following an operating parameter deviation;
  - i. according to the procedures in the manufacturer's documentation; or
  - ii. by comparing the sensor output to redundant sensor output; or
  - iii. by comparing the sensor output to the output from a calibrated temperature measurement device; or
  - iv. by comparing the sensor output to the output from a temperature simulator; and
- e. conduct accuracy checks any time the sensor exceeds the manufacturer's specified maximum operating temperature range or install a new temperature sensor; and
- f. at least quarterly or following an operating parameter deviation, perform visual inspections of components if redundant sensors are not used.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.8688(b))*

- (7) For each pressure measurement device, the permittee must meet the requirements of section d)(4) and the following:
  - a. locate the pressure sensor(s) in, or as close as possible to, a position that provides a representative measurement of the pressure;
  - b. use a gauge with a minimum measurement sensitivity of 0.12 kilopascals or a transducer with a minimum measurement sensitivity of 5 percent of the pressure range;
  - c. check pressure tap pluggage daily, and perform an accuracy check at least quarterly or following an operating parameter deviation:
    - i. according to the procedures in the manufacturer's documentation; or
    - ii. by comparing the sensor to redundant sensor output;
  - d. conduct calibration checks any time the sensor exceeds the manufacturer's specified maximum operating pressure range or install a new sensor;
  - e. at least monthly or following an operating parameter deviation, perform a leak check of all components for integrity, all electrical connections for continuity, and all mechanical connections for leakage; and
  - f. at least quarterly or following an operating parameter deviation, perform visible inspections on all components if redundant sensors are not used.



*(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.8688(c))*

- (8) For monitoring parameters other than temperature and pressure drop, the permittee must install and operate a CPMS to provide representative measurements of the monitored parameters.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.8688(d))*

- (9) As an option to installing the CPMS specified in section d)(4), the permittee may install a continuous emissions monitoring system (CEMS) or a continuous opacity monitoring system (COMS) that meets the requirements specified in 40 CFR 63.8 and the applicable performance specifications of 40 CFR Part 60, Appendix B.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.8688(f))*

- (10) For each monitoring system, the permittee must develop and make available for inspection by the permitting authority, upon request, a site-specific monitoring plan that addresses the following:

- a. installation of the CPMS, CEMS, or COMS sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (i.e., on or downstream of the last control device);
- b. performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction system; and
- c. performance evaluation procedures and acceptance criteria (i.e., calibrations).

*(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.8688(g))*

- (11) The site-specific monitoring plan must also address the following:

- a. ongoing operation and maintenance procedures in accordance with general requirements of sections 40 CFR 63.8(c)(1), (c)(3), (c)(4)(ii), (c)(7), and (c)(8);
- b. ongoing data quality assurance procedures in accordance with the general requirements of section 40 CFR 63.8(d); and
- c. ongoing record keeping and reporting procedures in accordance with the general requirements of sections 40 CFR 63.10(c), (e)(1), and (e)(2)(i).

*(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.8688(h))*

- (12) The permittee must conduct a performance evaluation of each CPMS, CEMS, or COMS in accordance with the site-specific monitoring plan.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.8688(i))*

- (13) The permittee must operate and maintain the CPMS, CEMS, or COMS in continuous operation according to the site-specific monitoring plan.



*(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.8688(j))*

- (14) The permittee shall maintain monthly records of the following information for P906 and P908:
- a. the asphalt throughput and shingle production rates, in tons, for each month;
  - b. the PE/PM10, H2S, SO2, CO, and VOC emissions (for P906, PE/PM10, CO, and VOC) for each month based upon the results of the latest stack test;
  - c. the rolling, 12-month summation of the asphalt throughput and shingle production rates, in tons; and
  - d. the rolling, 12-month summation of the PE/PM10, H2S, SO2, CO, and VOC emissions, in tons (for P908 only).

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

- (15) The permittee shall maintains records of the following information on a monthly basis in accordance with the requirements of 63.10(b)(1):
- a. records specified in 63.10(b)(2) of all measurements needed to demonstrate compliance, including:
    - i. volatile matter and coating solids content data for the purpose of demonstrating compliance in accordance with the requirements of 63.3360(d).
  - b. records specified in 63.10(c) for each CMS operated by the permittee in accordance with the requirements of 63.3350(b).

*(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.3410)*

e) Reporting Requirements

- (1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

*(Authority for term: OAC rule 3745-15-03(A))*

- (2) The permittee shall submit quarterly deviation (excursion) reports that identify the following:
- a. all exceedances of the rolling, 12-month asphalt throughput and shingle production limitations; and
  - b. all exceedances of the rolling, 12-month PE/PM10, H2S, SO2, CO, and VOC emission limitations (for P908 only).



The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

- (3) The permittee shall submit semiannual written reports that (a) identify all days during which any visible emissions were observed from the stacks serving these emissions units or any visible emissions of fugitive dust were observed and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the Akron RAQMD) by January 31 and July 31 of each year and shall cover the previous 6-month period.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

- (4) The permittee shall submit compliance reports that contain the information required by 40 CFR 63.8693(c). The reports shall cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31. The compliance reports must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.8693(b)(3) & (b)(4))*

- (5) The permittee shall submit compliance reports that contain the information required by 40 CFR 63.3400(c). The reports shall cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31. The compliance reports must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.3400)*

f) Testing Requirements

- (1) Compliance with the emission limitations in section b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitations:

Visible PE from any stack shall not exceed 10% opacity, as a 6-minute average.

Visible emissions of fugitive dust shall not exceed 10% opacity, as a 3-minute average.

Applicable Compliance Method:

If required, compliance with the visible PE limitation shall be demonstrated through the results of visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*



b. Emission Limitations:

PE/PM10 shall not exceed 2.60 pounds per hour; and 11.4 tons per year. (P906)

PE/PM10 shall not exceed 3.70 pounds per hour; and 14.15 tons per year based upon a rolling, 12-month summation of emissions. (P908)

Applicable Compliance Method:

If required, compliance with the PE hourly limitation shall be demonstrated through the results of stack testing performed in accordance with Methods 1 - 5 of 40 CFR Part 60, Appendix A..

The annual emission limitation for P906 was developed by multiplying the hourly mass emission limitation by 8760 hours per year, and then dividing by 2000. Therefore, compliance with the annual limitation shall be demonstrated if compliance with the hourly limitation is maintained.

Compliance with the annual limitation for P908 can be ensured by compliance with the both the hourly limitation and the annual throughput limitation.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

c. Emission Limitations:

H2S shall not exceed 0.26 pounds per hour; and 1.03 tons per year based upon a rolling, 12-month summation of emissions. (P908)

Applicable Compliance Method:

If required, compliance with the H2S hourly limitation shall be demonstrated through the results of stack testing performed in accordance with Methods 1 - 4, and 15 of 40 CFR Part 60, Appendix A..

Compliance with the annual limitation shall be demonstrated as long as compliance with the both the hourly limitation and the annual throughput limitation is maintained.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

d. Emission Limitations:

CO shall not exceed 5.51 pounds per hour; and 24.2 tons per year. (P906)

CO shall not exceed 7.86 pounds per hour; and 30.01 tons per year based upon a rolling, 12-month summation of emissions. (P908)



Applicable Compliance Method:

Compliance with the CO hourly limitation shall be demonstrated through the results of stack testing performed in accordance with Methods 1 - 4, and 10 of 40 CFR Part 60, Appendix A in accordance with section f)(2).

The annual emission limitation for P906 was developed by multiplying the hourly mass emission limitation by 8760 hours per year, and then dividing by 2000. Therefore, compliance with the annual limitation shall be demonstrated if compliance with the hourly limitation is maintained.

Compliance with the annual limitation for P908 shall be ensured by compliance with the both the hourly limitation and the annual throughput limitation.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

e. Emission Limitations:

VOC shall not exceed 4.62 pounds per hour; and 20.3 tons per year. (P906)

VOC shall not exceed 6.59 pounds per hour; and 25.16 tons per year based upon a rolling, 12-month summation of emissions. (P908)

Applicable Compliance Method:

Compliance with the hourly VOC limitation shall be demonstrated through the results of stack testing performed in accordance with Methods 1 - 4 and 18 or 25/25A, as appropriate, of 40 CFR Part 60, Appendix A, in accordance with section f)(2).

The annual emission limitation for P906 was developed by multiplying the hourly mass emission limitation by 8760 hours per year, and then dividing by 2000. Therefore, compliance with the annual limitation shall be demonstrated if compliance with the hourly limitation is maintained.

Compliance with the annual limitation for P908 shall be demonstrated as long as compliance with the both the hourly and annual throughput limitations is maintained.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

f. Emission Limitations:

SO<sub>2</sub> shall not exceed 0.25 pounds per hour; and 1.00 tons per year based upon a rolling, 12-month summation of emissions. (P908)

Applicable Compliance Method:

If required, compliance with the hourly SO<sub>2</sub> limitation shall be demonstrated through the results of stack testing performed in accordance with Methods 1 - 4, and 6 or 6C of 40 CFR Part 60, Appendix A..



Compliance with the annual limitation shall be demonstrated as long as compliance with the both the hourly and annual throughput limitations is maintained.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

g. Emission Limitation:

Total PE from the coater, coating mixer, filler mixer, sealant applicator, and adhesive applicator shall be limited to 0.04 kilogram of particulate per megagram (kg/Mg) (0.8 lb/ton) of asphalt shingle or mineral-surfaced roll roofing produced.

Applicable Compliance Method:

To determine compliance with the particulate emission rate, use Equations 1 and 2 as follow:

$$E = Mpm / P \quad (\text{Eq. 1})$$

Where:

E = Particulate emissions, kilograms of particulate per megagram of roofing product manufactured;

Mpm = Particulate hourly emission rate, kilograms per hour, determined using Equation 2; and

P = The asphalt roofing product manufacturing rate during the emissions sampling period, including and material trimmed from the final product, megagram per hour.

$$Mpm = C * Q * K \quad (\text{Eq. 2})$$

Where:

Mpm = Particulate hourly emission rate, kilograms per hour;

C = concentration of particulate on a dry basis, grams per dry standard cubic meter (g/dscm), as measured by the test method specified in Table 3 of 40 CFR 63, Subpart LLLLLL;

Q = Vent gas steam flow rate (dry standard cubic meters per minute) at a temperature of 20 degrees C, as measure by the test method specified in Table 3 of 40 CFR 63, Subpart LLLLLL;

K = Unit conversion constant (0.06 minute-kilogram / hour-gram).

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

h. Emission Limitations:

Organic HAP emissions shall be limited to the following:



no more than 4 percent of the mass of coating materials applied for each month;  
or

no more than 20 percent of the mass of coating solids applied for each month.

Applicable Compliance Method:

Compliance shall be determined in accordance with the testing procedures in 40 CFR 63.3360(c) and (d).

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

(2) 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 12 months prior to the permit expiration.
- b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate(s) for particulates, VOC, and CO.
- c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

For PE, the test methods included in Table 3 of 40 CFR Part 63, Subpart LLLLLL;  
for VOC, Methods 1 thru 4 and 18 or 25/25A of 40 CFR Part 60, Appendix A; and  
for CO, Methods 1 thru 4, and 10 or 10B of 40 CFR Part 60, Appendix A.

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

- d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Akron RAQMD. Compliance shall be based on comparing the results of the performance tests to the sum of the allowable emission limitations for the emissions units that vent to the fiber bed filters and were in operation during the performance test.
- e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Akron RAQMD. 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 Akron RAQMD's refusal to accept the results of the emission test(s).
- f. Personnel from the Akron RAQMD 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.

- g. 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 Akron RAQMD 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 Akron RAQMD.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

g) Miscellaneous Requirements

- (1) None.



**9. Emissions Unit Group -Converter Group: P006 and P007**

EU ID	Operations, Property and/or Equipment Description
P006	Converter #4 - Asphalt blowing still controlled by PCC Thermal Incinerator
P007	Converter #5 - Asphalt blowing still controlled by PCC Thermal Incinerator

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)  (PTI 16-02347, as effective 08/16/05)	<b>From each converter (P006 and P007):</b>  Particulate emissions (PE/PM10) shall not exceed 3.57 pounds per hour.  Nitrogen oxides (NOx) emissions shall not exceed 2.85 pounds per hour, and 12.49 tons per year.  Hydrogen sulfide (H2S) emissions shall not exceed 0.18 pound per hour.  Hydrogen chloride (HCl) emissions shall not exceed 5.27 pounds per hour, and 16.44 tons per year.  Lead emissions shall not exceed 1.06E-03 pound per hour, and 4.66E-03 ton per year.  Sulfur dioxide (SO2) emissions shall not exceed 26.93 pounds per hour.  Carbon monoxide (CO) emissions shall not exceed 17.60 pounds per hour.  Volatile organic compound (VOC)



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		<p>emissions shall not exceed 2.02 pounds per hour.            Visible PE from the exhaust stack shall not exceed 0% opacity.</p> <p>See Section B)(18) for the fossil fuel combustion emission limits for the PCC thermal incinerator.</p>
b.	OAC rule 3745-17-07(A) OAC rule 3745-17-11(B)	The emission limitations specified by these rules are less stringent than the emissions limitations established pursuant to OAC rule 3745-31-05(A)(3).
c.	OAC rules 3745-31-13 through 20	<p><b>From each convertor (P006 and P007):</b></p> <p>The emissions per rolling, 12-month summation shall not exceed the following:</p> <p>77.10 tons per year of CO;            8.85 tons per year of VOC; and            75.55 tons per year SO<sub>2</sub>.</p> <p>The overall control efficiency (including capture and control) shall not be less than 95% for CO and VOC.</p>
d.	OAC rule 3745-31-05(D)	<p><b>From each convertor (P006 and P007):</b></p> <p>The emissions per rolling, 12-month summation shall not exceed the following:</p> <p>15.64 tons per year PE/PM<sub>10</sub>; and            0.78 ton per year H<sub>2</sub>S.</p> <p>See c)(1) below.</p>
e.	40 CFR Part 60, Subpart UU	<p>0.60 kilogram of particulates per megagram of asphalt charged to the still (1.2 pounds per ton)</p> <p>0.67 kilogram of particulates per megagram of asphalt charged to the still when a catalyst is added to the still (1.3 pounds per ton)</p> <p>Visible PE shall not exceed 0% opacity for the exhaust gases.</p>
f.	40 CFR Part 63, Subpart LLLLL	Reduce total hydrocarbon mass emissions by 95%, or to a concentration of 20 ppmv, on a dry basis corrected to 3



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		percent oxygen; or  route the emissions to a combustion device achieving a combustion efficiency of 99.5%.
g.	40 CFR 63.1-15	Table 7 to Subpart LLLLL of 40 CFR Part 63 - Applicability of General Provisions to Subpart LLLLL shows which parts of the General Provisions in 40 CFR 63.1 - 15 apply.
h.	OAC rule 3745-21-07(G)	Exempt. Asphalt is not considered a photochemically reactive material, as defined in OAC rule 3745-21-0(C)(5).  See b)(2)a.

(2) Additional Terms and Conditions

- a. On February 18, 2008, OAC rule 3745-21-07 was revised in its entirety, therefore, the 21-07 rule that was in effect prior to this date is no longer part of the State requirements. On April 4, 2008, the rule revision was submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP); however, until the U.S. EPA approves the revision to OAC rule 3745-21-07, the requirement to comply with the previous 21-07 rule provisions still exists as part of the federally-approved SIP for Ohio.
- b. All of the VOC emissions from this emissions unit shall be vented to the PCC thermal incinerator that shall meet the operational, monitoring, and record keeping requirements of this permit, when the emissions unit is in operation.

c) Operational Restrictions

The total, annual asphalt production rate for emissions units P003, P006, and P007, combined, shall not exceed 395,312 tons per year, as a rolling, 12-month summation. The permittee has existing asphalt production records and therefore does not need to be limited to first year asphalt throughput amounts.

*(Authority for term: OAC rule 3745-77-07(A)(1) and 3745-31-05(A)(3))*

d) Monitoring and/or Recordkeeping Requirements

- (1) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable average combustion temperature within the PCC thermal incinerator, as a 3-hour average when the emissions unit(s) controlled by the thermal incinerator is/are in operation, shall not be less than the average temperature measured during the most recent performance test that demonstrated the emissions unit(s) was/were in compliance.



*(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.8684(b))*

- (2) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable range established for the static pressure in the duct downstream of the PCC thermal incinerator is between 0.1 to 12 inches of water vacuum.

*(Authority for term: OAC rule 3745-31-05(A)(3) and 3745-77-07(C)(1))*

- (3) The permittee shall operate and maintain a continuous monitor and recorder which measures the static pressure in the duct downstream of the PCC thermal incinerator while the emissions unit is in operation. The monitoring equipment and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modification deemed necessary by the permittee. Exceedance of the normal operating static pressure range shall require shutdown, investigation of any problems and corrective action to enable operation in the normal range.

The permittee shall maintain monthly records which show the date(s) and time(s) when the static pressure falls below normal operating levels.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

- (4) The permittee shall maintain monthly records of the following information:
- a. the asphalt throughput rates (both with and without the use of a ferric chloride catalyst), in tons, for each month;
  - b. the PE/PM<sub>10</sub>, H<sub>2</sub>S, CO, VOC, and SO<sub>2</sub> emissions, in tons (both process and products of combustion from the thermal incinerator) for each month based on the results of the latest stack test;
  - c. the rolling, 12-month summation of the asphalt monthly throughput rates for P003, P006, and P007, combined, in tons; and
  - d. the rolling, 12-month summation of the PE/PM<sub>10</sub>, H<sub>2</sub>S, CO, VOC, and SO<sub>2</sub> emission rates, in tons (both process and products of combustion from the thermal incinerator).

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

- (5) The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
- a. the color of the emissions;
  - b. whether the emissions are representative of normal operations;



- c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
- d. the total duration of any visible emissions incident; and
- e. any corrective actions taken to eliminate the visible emissions.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

- (6) The permittee shall maintain records of the combustion zone temperature\* data along with the 3-hour averages.

\*[The terms “combustion temperature” and “combustion zone temperature” have identical definitions. “Combustion zone temperature” has been used in instances that the applicable MACT citation is being cited.]

*(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.8694(c))*

- (7) The permittee must install, operate, and maintain each continuous parameter monitoring system (CPMS) according to the following:

- a. the CPMS must complete a minimum of one cycle of operation for each successive 15-minute period;
- b. to determine the 3-hour average, the permittee must:
  - i. have a minimum of four successive cycles of operation to have a valid hour of data;
  - ii. have valid data from at least four equally spaced data values for that hour from a CPMS that is not out-of-control according to the permittee’s site-specific monitoring plan; and
  - iii. determine the 3-hour average of all recorded readings for each operating day, except as stated in section 63.8690(c) (the permittee must have at least two of the three hourly averages for that period using only hourly average values that are based on valid data(i.e., not from out-of-control periods)); and
- c. the permittee must record the results of each inspection, calibration, and validation check.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.8688(a))*

- (8) For each temperature monitoring device, the permittee must meet the requirements of section d)(7) and the following:

- a. locate the temperature sensor in a position that provides a representative temperature;



- b. for a non-cryogenic temperature range, use a temperature sensor with a minimum measurement sensitivity of 2.8 degrees C or 1.0 percent of the temperature value, whichever is larger;
- c. if a chart recorder is used, it must have a sensitivity in the minor division of at least 20 degrees F;
- d. perform an accuracy check at least semiannually or following an operating parameter deviation;
  - i. according to the procedures in the manufacturer's documentation; or
  - ii. by comparing the sensor output to redundant sensor output; or
  - iii. by comparing the sensor output to the output from a calibrated temperature measurement device; or
  - iv. by comparing the sensor output to the output from a temperature simulator; and
- e. conduct accuracy checks any time the sensor exceeds the manufacturer's specified maximum operating temperature range or install a new temperature sensor; and
- f. at least quarterly or following an operating parameter deviation, perform visual inspections of components if redundant sensors are not used.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.8688(b))*

- (9) As an option to installing the CPMS specified in section d)(7), the permittee may install a continuous emissions monitoring system (CEMS) or a continuous opacity monitoring system (COMS) that meets the requirements specified in 40 CFR 63.8 and the applicable performance specifications of 40 CFR Part 60, Appendix B.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.8688(f))*

- (10) For each monitoring system, the permittee must develop and make available for inspection by the permitting authority, upon request, a site-specific monitoring plan that addresses the following:
- a. installation of the CPMS, CEMS, or COMS sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (i.e., on or downstream of the last control device);
  - b. performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction system; and



- c. performance evaluation procedures and acceptance criteria (i.e., calibrations).

*(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.8688(g))*

- (11) The site-specific monitoring plan must also address the following:

- a. ongoing operation and maintenance procedures in accordance with general requirements of sections 40 CFR 63.8(c)(1), (c)(3), (c)(4)(ii), (c)(7), and (c)(8);
- b. ongoing data quality assurance procedures in accordance with the general requirements of section 40 CFR 63.8(d); and
- c. ongoing record keeping and reporting procedures in accordance with the general requirements of sections 40 CFR 63.10(c), (e)(1), and (e)(2)(i).

*(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.8688(h))*

- (12) The permittee must conduct a performance evaluation of each CPMS, CEMS, or COMS in accordance with the site-specific monitoring plan.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.8688(i))*

- (13) The permittee must operate and maintain the CPMS, CEMS, or COMS in continuous operation according to the site-specific monitoring plan.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.8688(j))*

e) Reporting Requirements

- (1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

*(Authority for term: OAC rule 3745-15-03(A))*

- (2) The permittee shall submit quarterly deviation (excursion) reports that identify the following:

- a. all exceedances of the rolling, 12-month asphalt throughput limitation;
- b. all exceedances of the rolling, 12-month emissions limitations (both process and products of combustion from the thermal incinerator);
- c. all periods of time during which the static pressure in the duct downstream of the PCC thermal incinerator exceeded the normal operating range; and

**Thermal Incinerator Requirements**

- d. each period of time (start time and date, and end time and date) when the average combustion temperature within the thermal incinerator was outside of the acceptable range;



- e. any period of time (start time and date, and end time and date) when the emissions unit(s) was/were in operation and the process emissions were not vented to the thermal incinerator;
- f. each incident of deviation described in “d” or “e” (above) where a prompt investigation was not conducted;
- g. each incident of deviation described in “d” or “e” where prompt corrective action, that would bring the emissions unit(s) into compliance and/or the temperature within the thermal incinerator into compliance with the acceptable range, was determined to be necessary and was not taken; and
- h. each incident of deviation described in “d” or “e” where proper records were not maintained for the investigation and/or the corrective action(s).

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

- (3) The permittee shall submit annual reports that specify the total PE/PM10, SO<sub>2</sub>, CO, VOC, and H<sub>2</sub>S emissions from each P006 and P007 for the previous calendar year. These reports shall be submitted by April 15<sup>th</sup> of each year. This reporting requirement may be satisfied by including and identifying the specific emissions data in the annual Fee Emission Reports.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

- (4) The permittee shall submit semiannual written reports that (a) identify all days during which any visible emissions were observed from the stack service this emissions unit or any visible emissions of fugitive dust were observed and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the Akron RAQMD) by January 31 and July 31 of each year and shall cover the previous 6-month period.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

- (5) The permittee shall submit compliance reports that contain the information required by 40 CFR 63.8693(c). The reports shall cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31. The compliance reports must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.8693(b)(3) & (b)(4))*

f) Testing Requirements

- (1) Compliance with the emission limitations in section b)(1) of these terms and conditions shall be determined in accordance with the following methods:



a. Emission Limitation:

Visible PE from the exhaust stack shall not exceed 0% opacity.

Applicable Compliance Method:

If required, compliance with the visible PE limitation shall be demonstrated through the results of visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

b. Emission Limitations:

PE/PM10 shall not exceed 3.57 pounds per hour.

PE/PM10 shall not exceed 15.64 tons per year, based upon a rolling, 12-month summation.

0.60 kilogram of particulates per megagram of asphalt charged to the still (1.2 pounds per ton)

0.67 kilogram of particulates per megagram of asphalt charged to the still when a catalyst is added to the still (1.3 pounds per ton)

Applicable Compliance Method:

Compliance with the hourly limitation shall be determined based upon the results of emission testing conducted in accordance with Methods 1-5, of 40 CFR Part 60, Appendix A and the requirements of section f)(2).

The annual emission limitation was developed by multiplying the hourly mass emission limitation (3.57 lb/hr) by 8760 hours per year, and then dividing by 2000. Therefore, compliance with the annual limitation shall be demonstrated if compliance with the hourly limitation is maintained.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

c. Emission Limitations:

SO2 emissions shall not exceed 26.93 pounds per hour.

SO2 emissions shall not exceed 75.55 tons per year, based upon a rolling, 12-month summation.

Applicable Compliance Method:

Compliance shall be determined based upon the results of emission testing conducted in accordance with Methods 1-4, and 6 or 6C of 40 CFR Part 60, Appendix A and the requirements of section f)(2).



Compliance with the tons per year limitation shall be demonstrated as follows:

$$[(1.40 \text{ lbSO}_2/\text{ton of asphalt produced}) \times (\text{Actual asphalt produced in tons/yr without ferric chloride catalyst})] + [(0.70 \text{ lbSO}_2/\text{ton of asphalt produced}) \times (\text{Actual asphalt produced in tons/yr with ferric chloride catalyst})] \times (1\text{ton}/2000 \text{ lbs}) = \text{tpy SO}_2$$

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

d. Emission Limitations:

CO emissions shall not exceed 17.60 pound per hour.

CO emissions shall not exceed 77.1 tons per year, based upon a rolling, 12-month summation.

Applicable Compliance Method:

Compliance with the hourly limitation shall be determined based upon the results of emission testing conducted in accordance with Methods 1-4, and 10 of 40 CFR Part 60, Appendix A and the requirements of section f)(2).

The annual emission limitation was developed by multiplying the hourly mass emission limitation by 8760 hours per year, and then dividing by 2000. Therefore, compliance with the annual limitation shall be demonstrated if compliance with the hourly limitation is maintained.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

e. Emission Limitations:

VOC emissions shall not exceed 2.02 pounds per hour.

VOC emissions shall not exceed 8.85 tons per year, based upon a rolling, 12-month summation.

Applicable Compliance Method:

Compliance with the hourly limitation shall be determined based upon the results of emission testing conducted in accordance with Methods 1-4 and 18 or 25/25A of 40 CFR Part 60, Appendix A and the requirements of section f)(2).

The annual emission limitation was developed by multiplying the hourly mass emission limitation by 8760 hours per year, and then dividing by 2000. Therefore, compliance with the annual limitation shall be demonstrated if compliance with the hourly limitation is maintained.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*



f. Emission Limitations:

H<sub>2</sub>S emissions shall not exceed 0.18 pound per hour.

H<sub>2</sub>S emissions shall not exceed 0.78 tons per year, based upon a rolling, 12-month summation.

Applicable Compliance Method:

If required, compliance with the hourly limitation shall be determined based upon the results of emission testing conducted in accordance with Methods 1-4, and 15 of 40 CFR Part 60, Appendix A.

The annual emission limitation was developed by multiplying the hourly mass emission limitation by 8760 hours per year, and then dividing by 2000. Therefore, compliance with the annual limitation shall be demonstrated if compliance with the hourly limitation is maintained.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

g. Emission Limitations:

NO<sub>x</sub> emissions shall not exceed 2.85 pound per hour, and 12.49 tons per year

Applicable Compliance Method:

Compliance with the hourly limitation shall be determined based upon the results of emission testing conducted in accordance with Methods 1-4, and 7 or 7E of 40 CFR Part 60, Appendix A and the requirements of section f)(2).

The annual emission limitation was developed by multiplying the hourly mass emission limitation by 8760 hours per year, and then dividing by 2000. Therefore, compliance with the annual limitation shall be demonstrated if compliance with the hourly limitation is maintained.

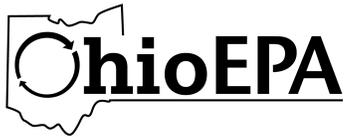
*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

h. Emission Limitations:

HCl emissions shall not exceed 5.27 pound per hour, and 16.44 tons per year.

Applicable Compliance Method:

Compliance with the hourly limitation shall be determined based upon the results of emission testing conducted in accordance with Methods 1-4, and 26 or 26A of 40 CFR Part 60, Appendix A and the requirements of section f)(2).



Compliance with the tons per year limitation shall be demonstrated as follows:

$$[(0.29 \text{ lb HCl/ton of asphalt produced}) \times (\text{Actual asphalt produced in tons/yr with ferric chloride catalyst})] + [(0.05 \text{ lb HCl/ton of asphalt produced}) \times (\text{Actual asphalt produced in tons/yr without ferric chloride catalyst})] \times (1\text{ton}/2000 \text{ lbs}) = \text{tpy HCl}$$

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

i. Emission Limitations:

Lead emissions shall not exceed 1.06E-03 pound per hour, and 4.66E-03 tons per year.

Applicable Compliance Method:

If required, compliance with the hourly limitation shall be determined based upon the results of emission testing conducted in accordance with Methods 1-4, and 12 of 40 CFR Part 60, Appendix A.

The annual emission limitation was developed by multiplying the hourly mass emission limitation by 8760 hours per year, and then dividing by 2000. Therefore, compliance with the annual limitation shall be demonstrated if compliance with the hourly limitation is maintained.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

j. Emission Limitations:

Reduce total hydrocarbon mass emissions by 95%, or to a concentration of 20 ppmv, on a dry basis corrected to 3 percent oxygen; or

route the emissions to a combustion device achieving a combustion efficiency of 99.5%.

Applicable Compliance Method:

To determine compliance with the total hydrocarbon percent reduction standard, use Equations 3 and 4 of this section as follows:

$$RE = [ (Mthci - Mthco) / (Mthci) ] * 100 \quad (\text{Eq. 3})$$

Where:

RE = Emission reduction efficiency, percent;

Mthci = Mass flow rate of total hydrocarbons entering the control device, kilograms per hour, determined using Equation 4; and

Mthco = Mass flow rate of total hydrocarbons exiting the control device, kilograms per hour, determined using Equation 4.



$$M_{thc} = C * Q * K \quad (\text{Eq. 4})$$

Where:

$M_{thc}$  = Total hydrocarbon emission rate, kilograms per hour;

C = Concentration of total hydrocarbons on a dry basis, parts per million by volume (ppmv), as measured by the test method specified in Table 3 of 40 CFR Part 63, Subpart LLLLL; and

Q = Vent gas stream flow rate (dscmm) at a temperature of 20 degrees C as measured by the test method specified in Table 3 of 40 CFR Part 63, Subpart LLLLL; and

K = Unit conversion constant (3.00E-05) (ppmv)<sup>-1</sup> (gram-mole / standard cubic meter) (kilogram / gram) (minutes / hour), where standard temperature for gram-mole/standard cubic meter is 20 degrees C.

To determine compliance with the combustion efficiency standard, Equation 5 of this section must be used, as follows:

$$CE = [ 1 - (CO / CO_2) - (THC / CO_2) ] \quad (\text{Eq. 5})$$

Where:

CE = Combustion efficiency, percent;

CO = Carbon monoxide concentration at the combustion device outlet, in parts per million by volume (dry), as measured by the test method specified in Table 3 of 40 CFR Part 63, Subpart LLLLL;

CO<sub>2</sub> = Carbon dioxide concentration at the combustion device outlet, in parts per million by volume (dry), as measured by the test method specified in Table 3 of 40 CFR Part 63, Subpart LLLLL; and

THC = Total hydrocarbon concentration at the combustion device outlet, in parts per million by volume (dry), as measured by the test method specified in Table 3 of 40 CFR Part 63, Subpart LLLLL.

To determine compliance with the total hydrocarbon destruction efficiency standard for a combustion device that does not use auxiliary fuel, Equation 6 of this section must be used, as follows:

$$THC\ DE = [ (CO + CO_2) / (CO + CO_2 + THC) ] \quad (\text{Eq. 6})$$



Where

THC DE = THC destruction efficiency, percent;

CO = Carbon monoxide concentration at the combustion device outlet, in parts per million by volume (dry), as measured by the test method specified in Table 3 of 40 CFR Part 63, Subpart LLLLL;

CO<sub>2</sub> = Carbon dioxide concentration at the combustion device outlet, in parts per million by volume (dry), as measured by the test method specified in Table 3 of 40 CFR Part 63, Subpart LLLLL; and

THC = Total hydrocarbon concentration at the combustion device outlet, in parts per million by volume (dry), as measured by the test method specified in Table 3 of 40 CFR Part 63, Subpart LLLLL.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.8687(e))*

k. Emission Limitation:

The overall control efficiency (including capture and control) shall not be less than 95% for CO and VOC.

Applicable Compliance Method:

If required, compliance with the control efficiency limitation shall be demonstrated through the results of stack testing performed in accordance with Methods 1 - 4 and 18 or 25/25A, as appropriate, for VOC and 10 or 10B for CO of 40 CFR Part 60, Appendix A, and in accordance with the test methods and procedures specified in 3745-21-10.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

(2) 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 12 months prior to the permit expiration.
- b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate(s) for PE, SO<sub>2</sub>, CO, VOC, NO<sub>x</sub>, HCl, and the total hydrocarbon/combustion efficiency requirements of 40 CFR Part 63, Subpart LLLLL.
- c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

for PE, Method 1 - 5 of 40 CFR Part 60, Appendix A and the procedures in 40 CFR Part 60.474, as applicable;



for SO<sub>2</sub>, Method 1 - 4, and 6 or 6C of 40 CFR Part 60, Appendix A;

for CO, Method 1 - 4, and 10 or 10B of 40 CFR Part 60, Appendix A;

for VOC, the test method specified in Table 3 of 40 CFR Part 63, Subpart LLLLL;

for NO<sub>x</sub>, Method 1 - 4, and 7 or 7E of 40 CFR Part 60, Appendix A; and

for HCl, Method 1 - 4, and 26 or 26A of 40 CFR Part 60, Appendix A;

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

- d. The test(s) shall be conducted while 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. Compliance shall be based on comparing the results of the performance tests to the sum of the allowable emission limitations for the emissions units that vent to the thermal incinerator and were in operation during the performance test.
- e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).
- f. 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.
- g. 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.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3) and 3745-15-04)*

g) Miscellaneous Requirements

- (1) None.



**10. Emissions Unit Group -Converter Group: P003, P004, and P005**

EU ID	Operations, Property and/or Equipment Description
P003	Converter #2 - Asphalt blowing still controlled by JZ Thermal Incinerator
P004	Converter #3 - Asphalt blowing still controlled by JZ Thermal Incinerator
P005	Converter #1 - Asphalt blowing still controlled by JZ Thermal Incinerator

- a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:
- (1) None.
- b) Applicable Emissions Limitations and/or Control Requirements
- (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(D)  (PTI 16-02347/P0106752 as effective 09/23/10)	<b>For P003:</b> The emissions per rolling, 12-month period shall not exceed:  CO - 66.26 tons per year; VOC - 7.61 tons per year; SO <sub>2</sub> - 65.38 tons per year; PE/PM <sub>10</sub> - 13.45 tons per year; and H <sub>2</sub> S - 0.67 ton per year.  See c)(1) below.
b.	OAC rule 3745-31-05(A)(3)  (PTI 16-420, as effective 03/05/86)	<b>For P005:</b> Particulate emissions (PE) shall not exceed 28.84 tons per year.
c.	OAC rule 3745-17-07(A)	The visible emission limitation based on this rule is less stringent than the limit established pursuant to 40 CFR Part 60, Subpart UU.
d.	OAC rule 3745-17-11	PE shall not exceed 11.5 pounds per hour (based on an uncontrolled mass rate of emissions for P003, P004, and P005 of 103.15 pounds per hour, and the use of Curve P-1 of Figure II)
e.	40 CFR Part 60, Subpart UU	0.60 kilogram of particulates per megagram of asphalt charged to the still



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		(1.2 pounds per ton)  0.67 kilogram of particulates per megagram of asphalt charged to the still when a catalyst is added to the still (1.3 pounds per ton)  Visible PE shall not exceed 0% opacity for the exhaust gases.
f.	40 CFR Part 63, Subpart LLLLL	Reduce total hydrocarbon mass emissions by 95%, or to a concentration of 20 ppmv, on a dry basis corrected to 3 percent oxygen; or  route the emissions to a combustion device achieving a combustion efficiency of 99.5%.
g.	40 CFR 63.1-15	Table 7 to Subpart LLLLL of 40 CFR Part 63 - Applicability of General Provisions to Subpart LLLLL shows which parts of the General Provisions in 40 CFR 63.1 - 15 apply.

(2) Additional Terms and Conditions

a. None.

c) Operational Restrictions

(1) The total, annual asphalt processed in emissions units P003, P006 and P007, combined, shall not exceed 395,312 tons per year, based upon a rolling, 12-month summation of the asphalt processed monthly rates. The permittee has existing asphalt production records and, therefore, does not need to be limited to the first year monthly asphalt throughput amounts.

*(Authority for term: OAC rule 3745-31-05(D) and 3745-77-07(A)(1))*

d) Monitoring and/or Recordkeeping Requirements

(1) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable range established for the static pressure in the duct downstream of the JZ thermal incinerator is between 0.8 to -2.5 inches of water vacuum.

*(Authority for term: OAC rule 3745-31-05(D) and 3745-77-07(C)(1))*

(2) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable average combustion temperature within the JZ thermal



incinerator, as a 3-hour average when the emissions unit(s) controlled by the thermal incinerator is/are in operation, shall not be less than the average temperature measured during the most recent performance test that demonstrated the emissions unit(s) was/were in compliance.

*(Authority for term: 3745-77-07(C)(1) and 40 CFR 63.8684(b))*

- (3) The permittee shall operate and maintain a continuous monitor and recorder which measures the static pressure in the duct downstream of the thermal incinerator while the emissions unit is in operation. The monitoring equipment and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modification deemed necessary by the permittee. Exceedance of the normal operating static pressure range shall require shutdown, investigation of any problems and corrective action to enable operation in the normal range.

The permittee shall maintain monthly records which show the date(s) and time(s) when the static pressure in the duct downstream of the thermal incinerator falls below normal operating levels.

*(Authority for term: OAC rule 3745-77-07(C)(1))*

- (4) The permittee shall maintain monthly records of the following information:
- a. the asphalt throughput rate for P003 (both with and without the use of a ferric chloride catalyst), in tons, for each month;
  - b. the rolling, 12-month summation of the asphalt monthly throughput rates for P003, P006, and P007, combined, in tons;
  - c. the PE/PM<sub>10</sub>, H<sub>2</sub>S, CO, VOC, and SO<sub>2</sub> emissions (for both the process and the products of combustion from the thermal incinerator), in tons, for each month for P003; and
  - d. the rolling, 12-month summation of the PE/PM<sub>10</sub>, H<sub>2</sub>S, CO, VOC, and SO<sub>2</sub> emission rates, in tons for P003 (for both the process and the products of combustion from the thermal incinerator).

*(Authority for term: OAC rule 3745-77-07(C)(1))*

- (5) The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
- a. the color of the emissions;
  - b. whether the emissions are representative of normal operations;



- c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
- d. the total duration of any visible emissions incident; and
- e. any corrective actions taken to eliminate the visible emissions.

*(Authority for term: OAC rule 3745-77-07(C)(1))*

- (6) The permittee shall maintain records of the combustion zone temperature\* data along with the 3-hour averages.

\*[The terms “combustion temperature” and “combustion zone temperature” have identical definitions. “Combustion zone temperature” has been used in instances that the applicable MACT citation is being cited.]

*(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.8694(c))*

- (7) The permittee must install, operate, and maintain each continuous parameter monitoring system (CPMS) according to the following:

- a. the CPMS must complete a minimum of one cycle of operation for each successive 15-minute period;
- b. to determine the 3-hour average, the permittee must:
  - i. have a minimum of four successive cycles of operation to have a valid hour of data;
  - ii. have valid data from at least four equally spaced data values for that hour from a CPMS that is not out-of-control according to the permittee’s site-specific monitoring plan; and
  - iii. determine the 3-hour average of all recorded readings for each operating day, except as stated in section 63.8690(c) (the permittee must have at least two of the three hourly averages for that period using only hourly average values that are based on valid data(i.e., not from out-of-control periods)); and
- c. the permittee must record the results of each inspection, calibration, and validation check.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.8688(a))*

- (8) For each temperature monitoring device, the permittee must meet the requirements of section d)(7) and the following:

- a. locate the temperature sensor in a position that provides a representative temperature;



- b. for a non-cryogenic temperature range, use a temperature sensor with a minimum measurement sensitivity of 2.8 degrees C or 1.0 percent of the temperature value, whichever is larger;
- c. if a chart recorder is used, it must have a sensitivity in the minor division of at least 20 degrees F;
- d. perform an accuracy check at least semiannually or following an operating parameter deviation;
  - i. according to the procedures in the manufacturer's documentation; or
  - ii. by comparing the sensor output to redundant sensor output; or
  - iii. by comparing the sensor output to the output from a calibrated temperature measurement device; or
  - iv. by comparing the sensor output to the output from a temperature simulator; and
- e. conduct accuracy checks any time the sensor exceeds the manufacturer's specified maximum operating temperature range or install a new temperature sensor; and
- f. at least quarterly or following an operating parameter deviation, perform visual inspections of components if redundant sensors are not used.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.8688(b))*

- (9) As an option to installing the CPMS specified in section d)(7), the permittee may install a continuous emissions monitoring system (CEMS) or a continuous opacity monitoring system (COMS) that meets the requirements specified in 40 CFR 63.8 and the applicable performance specifications of 40 CFR Part 60, Appendix B.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.8688(f))*

- (10) For each monitoring system, the permittee must develop and make available for inspection by the permitting authority, upon request, a site-specific monitoring plan that addresses the following:
  - a. installation of the CPMS, CEMS, or COMS sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (i.e., on or downstream of the last control device);
  - b. performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction system; and



- c. performance evaluation procedures and acceptance criteria (i.e., calibrations).

*(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.8688(g))*

- (11) The site-specific monitoring plan must also address the following:

- a. ongoing operation and maintenance procedures in accordance with general requirements of sections 40 CFR 63.8(c)(1), (c)(3), (c)(4)(ii), (c)(7), and (c)(8);
- b. ongoing data quality assurance procedures in accordance with the general requirements of section 40 CFR 63.8(d); and
- c. ongoing record keeping and reporting procedures in accordance with the general requirements of sections 40 CFR 63.10(c), (e)(1), and (e)(2)(i).

*(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.8688(h))*

- (12) The permittee must conduct a performance evaluation of each CPMS, CEMS, or COMS in accordance with the site-specific monitoring plan.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.8688(i))*

- (13) The permittee must operate and maintain the CPMS, CEMS, or COMS in continuous operation according to the site-specific monitoring plan.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.8688(j))*

e) Reporting Requirements

- (1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

*(Authority for term: OAC rule 3745-15-03(A))*

- (2) The permittee shall submit quarterly deviation (excursion) reports that identify the following:

- a. all exceedances of the rolling, 12-month asphalt processing rate limitation for P003, P006, and P007;
- b. all exceedances of the rolling, 12-month emissions limitations for P003 (for both the process and the products of combustion from the thermal incinerator);
- c. all periods of time during which the static pressure in the duct downstream of the thermal incinerator exceeded the normal operating range; and

**Thermal Incinerator Requirements**

- d. each period of time (start time and date, and end time and date) when the average combustion temperature within the thermal incinerator was outside of the acceptable range;



- e. any period of time (start time and date, and end time and date) when the emissions unit(s) was/were in operation and the process emissions were not vented to the thermal incinerator;
- f. each incident of deviation described in "d" or "e" (above) where a prompt investigation was not conducted;
- g. each incident of deviation described in "d" or "e" where prompt corrective action, that would bring the emissions unit(s) into compliance and/or the temperature within the thermal incinerator into compliance with the acceptable range, was determined to be necessary and was not taken; and
- h. each incident of deviation described in "d" or "e" where proper records were not maintained for the investigation and/or the corrective action(s).

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

*(Authority for term: OAC rule 3745-77-07(C)(1))*

- (3) The permittee shall submit annual reports that specify the total PE/PM10, SO<sub>2</sub>, CO, VOC, and H<sub>2</sub>S emissions from P003 for the previous calendar year. These reports shall be submitted by April 15<sup>th</sup> of each year. This reporting requirement may be satisfied by including and identifying the specific emissions data in the annual Fee Emission Reports.

*(Authority for term: OAC rule 3745-77-07(C)(1))*

- (4) The permittee shall submit semiannual written reports that (a) identify all days during which any visible emissions were observed from the stack serving these emissions units, and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the Akron RAQMD) by January 31 and July 31 of each year and shall cover the previous 6-month period.

*(Authority for term: OAC rule 3745-77-07(C)(1))*

- (5) The permittee shall submit compliance reports that contain the information required by 40 CFR 63.8693(c). The reports shall cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31. The compliance reports must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.8693(b)(3) & (b)(4))*

f) Testing Requirements

- (1) Compliance with the emission limitations in section b)(1) of these terms and conditions shall be determined in accordance with the following methods:



a. Emission Limitation:

Visible PE shall not exceed 0% opacity for the exhaust gases.

Applicable Compliance Method:

If required, compliance with the visible PE limitation shall be demonstrated through the results of visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

*(Authority for term: OAC rule 3745-77-07(C)(1))*

b. Emission Limitations:

0.60 kilogram of particulates per megagram of asphalt charged to the still (1.2 pounds per ton)

0.67 kilogram of particulates per megagram of asphalt charged to the still when a catalyst is added to the still (1.3 pounds per ton)

Applicable Compliance Method:

Compliance with the limitation shall be determined based upon the results of emission testing conducted in accordance with Methods 1-5, of 40 CFR Part 60, Appendix A and the requirements of section f)(2).

*(Authority for term: OAC rule 3745-77-07(C)(1))*

c. Emission Limitations:

**For P003:**

PE/PM10 shall not exceed 13.45 tons per year as a rolling, 12-month summation

H<sub>2</sub>S shall not exceed 0.67 tons per year as a rolling, 12-month summation

CO shall not exceed 66.26 tons per year as a rolling, 12-month summation

VOC shall not exceed 7.61 tons per year as a rolling, 12-month summation

SO<sub>2</sub> shall not exceed 65.38 tons per year as a rolling, 12-month summation

Applicable Compliance Method:

Compliance with the rolling, 12-month summation shall be demonstrated as long as compliance with the rolling, 12-month production/throughput limitation is maintained.

*(Authority for term: OAC rule 3745-77-07(C)(1))*



d. Emission Limitation:

PE shall not exceed 11.5 pounds per hour from P003, P004, and P005, combined

Applicable Compliance Method:

If required, compliance with the hourly mass emission limitation shall be determined through the results of testing in accordance with Methods 1-5 of 40 CFR Part 60, Appendix A.

*(Authority for term: OAC rule 3745-77-07(C)(1))*

e. Emission Limitation:

For P005: PE shall not exceed 28.84 tons per year.

Applicable Compliance Method:

Compliance with the annual mass emission limitation shall be determined by multiplying the results of the most recent stack test (in pounds per hour of PE) by 8,760 hours of operation per year, and then dividing by 2,000 pounds per ton.

*(Authority for term: OAC rule 3745-77-07(C)(1))*

f. Emission Limitation:

Reduce total hydrocarbon mass emissions by 95%, or to a concentration of 20 ppmv, on a dry basis corrected to 3 percent oxygen; or

route the emissions to a combustion device achieving a combustion efficiency of 99.5%.

Applicable Compliance Method:

To determine compliance with the total hydrocarbon percent reduction standard, use Equations 3 and 4 of this section as follows:

$$RE = [ (Mthci - Mthco) / (Mthci) ] * 100 \quad (\text{Eq. 3})$$

Where:

RE = Emission reduction efficiency, percent;

Mthci = Mass flow rate of total hydrocarbons entering the control device, kilograms per hour, determined using Equation 4; and

Mthco = Mass flow rate of total hydrocarbons exiting the control device, kilograms per hour, determined using Equation 4.

$$Mthc = C * Q * K \quad (\text{Eq. 4})$$



Where:

M<sub>thc</sub> = Total hydrocarbon emission rate, kilograms per hour;

C = Concentration of total hydrocarbons on a dry basis, parts per million by volume (ppmv), as measured by the test method specified in Table 3 of 40 CFR Part 63, Subpart LLLLL; and

Q = Vent gas stream flow rate (dscmm) at a temperature of 20 degrees C as measured by the test method specified in Table 3 of 40 CFR Part 63, Subpart LLLLL; and

K = Unit conversion constant (3.00E-05) (ppmv)<sup>-1</sup> (gram-mole / standard cubic meter) (kilogram / gram) (minutes / hour), where standard temperature for gram-mole/standard cubic meter is 20 degrees C.

To determine compliance with the combustion efficiency standard, Equation 5 of this section must be used, as follows:

$$CE = [ 1 - (CO / CO_2) - (THC / CO_2) ] \quad (\text{Eq. 5})$$

Where:

CE = Combustion efficiency, percent;

CO = Carbon monoxide concentration at the combustion device outlet, in parts per million by volume (dry), as measured by the test method specified in Table 3 of 40 CFR Part 63, Subpart LLLLL;

CO<sub>2</sub> = Carbon dioxide concentration at the combustion device outlet, in parts per million by volume (dry), as measured by the test method specified in Table 3 of 40 CFR Part 63, Subpart LLLLL; and

THC = Total hydrocarbon concentration at the combustion device outlet, in parts per million by volume (dry), as measured by the test method specified in Table 3 of 40 CFR Part 63, Subpart LLLLL.

To determine compliance with the total hydrocarbon destruction efficiency standard for a combustion device that does not use auxiliary fuel, Equation 6 of this section must be used, as follows:

$$THC\ DE = [ (CO + CO_2) / (CO + CO_2 + THC) ] \quad (\text{Eq. 6})$$

Where

THC DE = THC destruction efficiency, percent;

CO = Carbon monoxide concentration at the combustion device outlet, in parts per million by volume (dry), as measured by the test method specified in Table 3 of 40 CFR Part 63, Subpart LLLLL;



CO<sub>2</sub> = Carbon dioxide concentration at the combustion device outlet, in parts per million by volume (dry), as measured by the test method specified in Table 3 of 40 CFR Part 63, Subpart LLLLL; and

THC = Total hydrocarbon concentration at the combustion device outlet, in parts per million by volume (dry), as measured by the test method specified in Table 3 of 40 CFR Part 63, Subpart LLLLL.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.8687(e))*

- (2) 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 12 months prior to the permit expiration.
  - b. The emission testing shall be conducted to demonstrate compliance with the total hydrocarbon/combustion efficiency requirements and particulate mass emission limitations.
  - c. The following test method(s) shall be employed to demonstrate compliance:  
  
for the total hydrocarbon/combustion efficiency requirements, the test methods included in Table 3 of 40 CFR Part 63, Subpart LLLLL; and  
  
for particulates, Methods 1 - 5 of 40 CFR Part 60, Appendix A, and the procedures in 40 CFR Part 60.474, as 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. Compliance shall be based on comparing the results of the performance tests to the sum of the allowable emission limitations for the emissions units that vent to the thermal incinerator and were in operation during the performance test.
  - e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).
  - f. 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.

- g. 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.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-15-04)*

- g) Miscellaneous Requirements
  - (1) None



**11. Emissions Unit Group -Cooling Sections: P910 and P911**

EU ID	Operations, Property and/or Equipment Description
P910	Cooling Section #2 - Cooling of asphalt coated product on the strip (4-Wide) roofing line.
P911	Cooling Section #1 - Cooling of asphalt coated product on the laminate (3-Wide) roofing line.

- a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:
- (1) None.
- b) Applicable Emissions Limitations and/or Control Requirements
- (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)  (PTI 16-02347, as effective 08/16/05)	Particulate emissions (PE/PM10) shall not exceed 7.02 pounds per hour. (P910)  PE/PM10 shall not exceed 4.81 pounds per hour. (P911)  Volatile organic compound (VOC) emissions shall not exceed 2.80 pounds per hour. (P910)  VOC emissions shall not exceed 1.92 pounds per hour. (P911)  Visible PE from any stack shall not exceed 10% opacity, as a 6-minute average.  Visible PE of fugitive dust shall not exceed 10% opacity, as a 3-minute average.
b.	OAC rule 3745-17-07(A) OAC rule 3745-17-07(B) OAC rule 3745-17-11	The emissions limitations specified by these rules are less stringent than the emissions limitations established pursuant to OAC rule 3745-31-05(A)(3).
c.	OAC rule 3745-17-08(B)	The permittee shall operate the existing hood to minimize PE and the emissions



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		of fugitive dust.
d.	OAC rules 3745-31-13 through 3745-31-20	The emissions per rolling, 12-month summation shall not exceed:  VOC - 11.06 tons (P910); and VOC - 6.83 tons (P911).
e.	OAC rule 3745-31-05(D)	The emissions per rolling, 12-month summation shall not exceed:  PE/PM10 - 27.69 tons (P910); and PE/PM10 - 17.09 tons (P911).  See c)(1) and c)(2) below.

(2) Additional Terms and Conditions

a. None.

c) Operational Restrictions

(1) The maximum throughput and production on the non-laminated (4-wide) roofing line shall not exceed 165,325.1 tons of asphalt throughput and 797,115.0 tons of shingle production based on a rolling 12-month summation. The permittee has existing operation records and therefore does not need to be limited to first year monthly throughput and production amounts.

*(Authority for term: OAC rules 3745-77-07(A)(1) and 3745-31-05(D))*

(2) The maximum throughput and production on the laminated (3-wide) roofing line shall not exceed 96,911.2 tons of asphalt throughput and 492,080.4 tons of shingle production based on a rolling 12-month summation. The permittee has existing operation records and therefore does not need to be limited to first year monthly throughput and production amounts.

*(Authority for term: OAC rules 3745-77-07(A)(1) and 3745-31-05(D))*

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall maintain monthly records of the following information for this emissions unit:

- a. the asphalt throughput and shingle production rates, in tons, for each month;
- b. the PE/PM10 and VOC emissions, in tons, for each month;
- c. the rolling, 12-month summation of the asphalt throughput and shingle production rates, in tons ; and



d. the rolling, 12-month summation of PE/PM10 and VOC emissions, in tons.

*(Authority for term: OAC rules 3745-31-05(A)(3) and 3745-77-07(C)(1))*

(2) The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit and any visible emissions of fugitive dust. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

- a. the color of the emissions;
- b. whether the emissions are representative of normal operations;
- c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
- d. the total duration of any visible emissions incident; and
- e. any corrective actions taken to eliminate the visible emissions.

*(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))*

e) Reporting Requirements

(1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

*(Authority for term: OAC rule 3745-15-03(A))*

(2) The permittee shall submit quarterly deviation (excursion) reports that identify the following:

- a. all exceedances of the rolling, 12-month asphalt throughput and shingle production limitations; and
- b. all exceedances of the rolling, 12-month PE/PM10 and VOC emissions limitations.

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

(3) The permittee shall also submit annual reports which specify the total PE/PM10 and VOC emissions from this emissions unit for the previous calendar year. These reports shall be submitted by April 15th of each year. This reporting requirement may be satisfied by including and identifying the specific emission data for this emissions unit in the annual Fee Emission Report.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*



- (4) The permittee shall submit semiannual written reports which (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and any visible emissions of fugitive dust and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

f) Testing Requirements

- (1) Compliance with the emission limitations in section b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

Visible PE from the exhaust stack shall not exceed 10% opacity as a 6-minute average, except as provided by rule.

Applicable Compliance Method:

If required, compliance with the visible PE limitation shall be demonstrated through the results of visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

b. Emission Limitation:

Visible PE of fugitive dust shall not exceed 10% opacity as a 3-minute average.

Applicable Compliance Method:

If required, compliance with the visible PE limitation shall be demonstrated through the results of visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

c. Emission Limitations:

PE/PM<sub>10</sub> shall not exceed 7.02 pounds per hour; and 27.69 tons per year, as a rolling, 12-month summation. (P910)

PE/PM<sub>10</sub> shall not exceed 4.81 pounds per hour; and 17.09 tons per year, as a rolling, 12-month summation. (P911)

Applicable Compliance Method:

If required, compliance with the hourly mass emissions limitation shall be determined by the results of emission testing in accordance with Methods 1-5, of 40 CFR Part 60, Appendix A.



Compliance with the annual limitation can be ensured by compliance with both the hourly limitation and the annual throughput/production limitations based on a rolling, 12-month summation.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

d. Emission Limitation:

VOC shall not exceed 2.80 pounds per hour; and 11.06 tons per year, as a rolling 12-month summation. (P910)

VOC shall not exceed 1.92 pounds per hour; and 6.83 tons per year, as a rolling 12-month summation. (P911)

Applicable Compliance Method:

If required, compliance with the hourly mass emissions limitation shall be determined by the results of emission testing in accordance with Methods 1-4 and 18 or 25/25A of 40 CFR Part 60, Appendix A.

Compliance with the annual limitations shall be demonstrated as long as compliance with both the hourly and the rolling, 12-month throughput/production limitations is maintained.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

g) Miscellaneous Requirements

- (1) None.



**12. Emissions Unit Group -Handling/Storage Group: P901, P902, P904, P919, P920, and P921**

EU ID	Operations, Property and/or Equipment Description
P901	Parting Agent Handling System - Unloading and Transfer of Parting Agent - Backdust Use Bins #1 and #2 Controlled with 2 Baghouses (Backdust Use Bin #1 and #2 Dust Collectors)
P902	Mineral Filler Handling System #1 - Unloading and Transfer of Filler for the Laminate (3-Wide) Roofing Line - Filler Upper Surge Bin #1, Filler Lower Surge Bin #1, and Filler Heater #1 Controlled with 2 Dust Collectors (Upper Surge Bin #1 and Filler Heater #1 Dust Collectors)
P904	Mineral Filler Handling System #2 - Unloading and Transfer of Filler for the Strip (4-Wide) Roofing Line - Filler Lower Surge Bin #2, Filler Heater #2, and Filler Upper Surge Bin #2 Controlled with 2Baghouses (Filler Heater #2 Dust Collector and Upper Surge Bin #2 Dust Collector).
P919	Mineral Filler Storage System #1 - Storage of Filler for the Laminate (3-Wide) Roofing Line - Filler Silos #1 and #2 Controlled with 2 Baghouses (Filler Silo #1 and #2 Dust Collectors)
P920	Mineral Filler Storage System #2 - Storage of Filler for the Strip (4-Wide) Roofing Line - Filler Silos #3 and #4 Controlled with 2 Baghouses (Filler Silo #3 and #4 Dust Collectors)
P921	Parting Agent Storage System - Storage of Parting Agent - Backdust Silo Controlled With a Baghouse (Backdust Silo Dust Collector)

- a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:
- (1) None.
- b) Applicable Emissions Limitations and/or Control Requirements
- (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)  (PTI P0106755, as effective 09/14/10)	Particulate emissions (PE/PM10) shall not exceed 0.29 pound per hour. (combined aggregate emissions from the 2 baghouses associated with P901)  PE/PM10 shall not exceed 0.65 pounds per hour. (combined aggregate emissions from the 2 baghouses associated with P904)  PE/PM10 shall not exceed 0.55 pound per hour. (combined aggregate emissions from the 2 dust collectors)



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		associated with P920)  PE/PM10 shall not exceed 0.09 pound per hour. (P921)
b.	OAC rule 3745-31-05(A)(3)  (PTI 16-02347, as effective 8/16/05)	<b>P902:</b> Particulate emissions (PE/PM10) shall not exceed:  0.30 pound per hour (Combined stack emissions);  0.20 pound per hour (Upper surge bin #1 dust collector stack); and  0.10 pounds per hour (Filler heater #1 dust collector stack).
c.	OAC rule 3745-31-05(D)	<b>P902:</b> PE/PM10 shall not exceed 1.23 tons per rolling 12-month summation.  See c)(2) below.
d.	OAC rule 3745-17-07(A) OAC rule 3745-17-07(B)	The visible emission limitation based on this rule is less stringent than the limit established pursuant to 40 CFR Part 60, Subpart UU.
e.	OAC rule 3745-17-08	<b>P901:</b> The use bins shall be enclosed to minimize or eliminate fugitive emissions. See b)(2)a.  <b>P902:</b> The surge bins shall be adequately enclosed and vented to dust collectors.  <b>P904:</b> See b)(2)b-f.  <b>P919, P921:</b> Each silo shall be enclosed and vented to a baghouse to minimize or eliminate fugitive emissions.  <b>P920 and P921:</b> The pneumatic unloading and conveying and each storage silo shall be enclosed and vented to a baghouse to minimize or eliminate fugitive emissions.
f.	OAC rule 3745-17-11	The PE limitation specified by this rule is less stringent than the PE limitation



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		established pursuant to OAC rule 3745-31-05(A)(3). (P901, P902, P904, P920, P921) PE shall not exceed 40.04 pounds per hour from each silo. (Based on process weight rate of 30 tph/silo and Table I). (P919)
g.	40 CFR Part 60, Subpart UU	Visible PE shall not exceed 1% opacity (fugitive and stack emissions)

(2) Additional Terms and Conditions

- a. **P901:** The specific operations, property, and/or equipment which constitute this emissions unit are listed below:
  - i. Parting agent use bin #1 and #2; and
  - ii. Belt conveying and transfer of parting agent to use bin #2 and #2.
- b. **P904:** The specific operations, property, and /or equipment which constitute this emissions unit are listed below:
  - i. Upper surge bin #2 and pneumatic conveying to filler upper surge bin #2;
  - ii. Transfer to filler heater #2; and
  - iii. Lower surge bin #2 and screw conveying to filler lower surge bin #2.
- c. **P904:**The pneumatic conveying to the upper surge bin, and the upper surge bin, shall be of an enclosed design. The upper surge bin shall vent to a baghouse to control particulate emissions.
- d. **P904:**The transfer of filler material to filler heater #2 shall be accomplished via an enclosed rotary valve.
- e. **P904:**The screw conveying to the lower surge bin, and the lower surge bin, shall be of an enclosed design. The lower surge bin shall vent to a baghouse to control particulate emissions.
- f. **P904:**The exhaust from the upper filler surge bin #2 shall exhaust horizontally through the side of the filler tower enclosure. This exhaust has been dispersion modeled as a horizontal exhaust. The exhaust from the lower surge bin #2 shall exhaust within the factory building.
- g. The emissions from this emissions unit shall be vented to a baghouse at all times the emissions unit is in operation.



c) Operational Restrictions

- (1) **P902:** The maximum annual operating hours for this emissions unit shall not exceed 8,250 hours per year, based upon a rolling, 12-month summation of the operating hours. The permittee has existing operation records and, therefore, does not need to be limited to first year monthly operating hours.

*(Authority for term: OAC rule 3745-77-07(A)(1) and 3745-31-05(A)(3))*

d) Monitoring and/or Recordkeeping Requirements

- (1) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable range established for the pressure drop across each baghouse is between the following:

<b>Dust Collector</b>	<b>Pressure Drop Range (inches of water)</b>
Use Bin #1 Baghouse (P901)	0.1 - 12
Use Bin #2 Baghouse (P901)	0.1 - 6
Upper Surge Bin #1 Dust Collector (P902)	0.1 - 26
Filler Heater #1 Dust Collector (P902)	0.1 - 5
Upper Surge Bin #2 Dust Collector (P904)	0.1 - 5
Filler Heater #2 Dust Collector (P904)	0.1 - 5
Filler Silo #1 Dust Collector (P919)	0.1 - 12
Filler Silo #2 Dust Collector (P919)	0.1 - 12
Filler Silo #3 Dust Collector (P920)	0.1 – 12.5
Filler Silo #4 Dust Collector (P920)	0.1 – 12.5
Backdust Silo Dust Collector (P921)	0.1 – 12.5

*(Authority for term: OAC rule 3745-77-07(C)(1))*

- (2) The permittee shall properly install, operate, and maintain equipment to continuously monitor the pressure drop, in inches of water, across each baghouse when the controlled emissions unit(s) is/are in operation, including periods of startup and shutdown. The permittee shall record the pressure drop across each baghouse on a daily basis. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee.

Whenever the monitored value for the pressure drop deviates from the limit or range established in accordance with this permit, the permittee shall promptly investigate the



cause of the deviation. The permittee shall maintain records of the following information for each investigation:

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

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified in this permit, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

- f. a description of the corrective action;
- g. the date corrective action was completed;
- h. the date and time the deviation ended;
- i. the total period of time (in minutes) during which there was a deviation;
- j. the pressure drop readings immediately after the corrective action was implemented; and
- k. the name(s) of the personnel who performed the work.

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

This range or limit on the pressure drop across each baghouse is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the permitted limit or range for the pressure drop based upon information obtained during future testing that demonstrate compliance with the allowable particulate emission rate for the controlled emissions unit(s). In addition, approved revisions to the range or limit will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of a minor permit modification.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

- (3) The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions of fugitive dust



and visible particulate emissions from the stacks serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

- a. the color of the emissions;
- b. whether the emissions are representative of normal operations;
- c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
- d. the total duration of any visible emissions incident; and  
any corrective actions taken to eliminate the visible emissions.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

(4) The permittee shall maintain monthly records of the following information for P902:

- a. the operating hours for each month;
- b. the PE/PM10 emissions, in tons, for each month;
- c. the rolling, 12-month summation of the operating hours; and
- d. the rolling, 12-month summation of the PE/PM10 emissions, in tons.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

e) Reporting Requirements

(1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

*(Authority for term: OAC rule 3745-15-03(A))*

(2) The permittee shall submit quarterly deviation (excursion) reports that identify the following:

- a. For P902, all exceedances of the rolling, 12-month operating hours limitation; and
- b. For P902, all exceedances of the rolling, 12-month PE/PM10 emission limitations.

**For the Dust Collectors:**

- c. each period of time (start time and date, and end time and date) when the pressure drop across eachbaghouse was outside of the acceptable range;



- d. any period of time (start time and date, and end time and date) when the emissions unit(s) was/were in operation and the process emissions were not vented to the baghouse;
- e. each incident of deviation described in "c" (above) where a prompt investigation was not conducted;
- f. each incident of deviation described in "c" where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and
- g. each incident of deviation described in "c" where proper records were not maintained for the investigation and/or the corrective action(s), as identified in the monitoring and record keeping requirements of this permit.

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

- (3) The permittee shall submit semiannual written reports that (a) identify all days during which any visible emissions were observed from the stacks serving these emissions units or any visible emissions of fugitive dust were observed and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the Akron RAQMD) by January 31 and July 31 of each year and shall cover the previous 6-month period.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

f) Testing Requirements

- (1) Compliance with the emission limitations in section b)(1) of these terms and conditions shall be determined in accordance with the following methods:

- a. Emission Limitation:

1% opacity for visible emissions (fugitive and stack emissions)

Applicable Compliance Method:

If required, compliance with the visible PE limitation shall be demonstrated through the results of visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

- b. Emission Limitations:

PE/PM10 shall not exceed 0.29 pounds per hour (combined aggregate emissions from the 2 baghouses associated with P901)



PE/PM10 shall not exceed 0.65 pounds per hour (combined aggregate emissions from the 2 baghouses associated with P904)

PE shall not exceed 40.04 pounds per hour per silo. (P919)

PE/PM10 shall not exceed 0.55 pound per hour (combined aggregate emissions from the 2 dust collectors associated with P920)

PE/PM10 shall not exceed 0.09 pound per hour. (P921)

PE/PM10 shall not exceed:

0.30 pound per hour (Combined stack emissions) (P902);

0.20 pound per hour (Upper surge bin #1 dust collector stack) (P902);  
and

0.10 pounds per hour (Filler heater #1 dust collector stack) (P902).

Applicable Compliance Method:

If required, compliance with the hourly limitation above shall be determined through the results of testing in accordance with Methods 1 - 5 of 40 CFR Part 60, Appendix A.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

c. Emission Limitation:

PE/PM10 shall not exceed 1.23 tons per year. (P902)

Applicable Compliance Method:

Compliance with the annual limitation shall be demonstrated as long as compliance with the lb/hr and the annual operating hour limitations is maintained.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

g) Miscellaneous Requirements

(1) None



**13. Emissions Unit Group -Handling/Storage Group: P918 and P922**

EU ID	Operations, Property and/or Equipment Description
P918	Surfacing Material System #1 - Unloading, Transfer, and Storage of Headlap Granules. The 3-Wide Headlap Use Bins and 4-Wide Headlap Use Bins Controlled with 2 Baghouses (3-Wide Process Dust Collector and 4-Wide Process Dust Collector).
P922	Surfacing Material System #2 - Unloading, Transfer, and Storage of Prime Granules - 3-Wide Granule Use Bins and 4-Wide Granule Use Bins Controlled with 2 Baghouses (3-Wide Process Dust Collector and 4-Wide Process Dust Collector).

- a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:
- (1) None.
- b) Applicable Emissions Limitations and/or Control Requirements
- (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)  (PTI P0106755, as effective 09/14/10)	See Section B)(7)
b.	OAC rule 3745-31-05(F)	See Section B)(8)
c.	OAC rule 3745-17-07(A)	<p><b>P918/P922 (non-UU equipment):</b> Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.</p> <p><b>P922 (NSPS UU equipment):</b> The visible emission limitation based on this rule is less stringent than the limit established pursuant to 40 CFR Part 60, Subpart UU.</p>
d.	OAC rule 3745-17-07(B)	<p><b>P918/P922 (non-UU equipment):</b> Visible particulate emissions shall not exceed 20% opacity as a 3-minute average for fugitive emissions.</p> <p><b>P922 (UU equipment):</b> The visible emission limitation based on this rule is</p>



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		less stringent than the limit established pursuant to 40 CFR Part 60, Subpart UU.
e.	OAC rule 3745-17-08	The use bins shall be adequately enclosed and vented to a baghouse.
f.	OAC rule 3745-17-11	The PE limitation specified by this rule is less stringent than the PE limitation established pursuant to OAC rule 3745-31-05(A)(3).
g.	40 CFR Part 60, Subpart UU	<b>P918:</b> Not subject. See b)(2)b-c.  <b>P922:</b> 1% opacity from the discharge of any mineral unloading from a carrier, conveyor transfer to the storage silos from the carrier, and the storage silos themselves. See b)(2)b.

(2) Additional Terms and Conditions

- a. The emissions from the use bins shall be vented to a baghouse at all times the emissions unit is in operation.
- b. Any material handling equipment that follows the storage silos (including transfer to use bins and the use bins) does not fall within the definition of a “mineral handling and storage facility” and is not subject to the requirements of 40 CFR Part 60, Subpart UU.
- c. Any equipment installed prior to November 18, 1990 (including the headlap surfacing material unloading/storage and the headlap transfer system) is not subject to the requirements of 40 CFR Part 60, Subpart UU due to the provisions of 40 CFR 60.470(b), unless the equipment is modified.

c) Operational Restrictions

- (1) None.

d) Monitoring and/or Recordkeeping Requirements

- (1) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable range established for the pressure drop across each baghouse is between the following:



<b>Dust Collector</b>	<b>Pressure Drop Range (inches of water)</b>
3-Wide Roofing Line Dust Collector	0.1 - 12.5
4-Wide Roofing Line Dust Collector	0.1 - 12.5

*(Authority for term: OAC rule 3745-77-07(C)(1))*

- (2) The permittee shall properly install, operate, and maintain equipment to continuously monitor the pressure drop, in inches of water, across each baghouse when the controlled emissions unit(s) is/are in operation, including periods of startup and shutdown. The permittee shall record the pressure drop across each baghouse on a daily basis. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee.

Whenever the monitored value for the pressure drop deviates from the limit or range established in accordance with this permit, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:

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

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified in this permit, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

- f. a description of the corrective action;
- g. the date corrective action was completed;
- h. the date and time the deviation ended;
- i. the total period of time (in minutes) during which there was a deviation;
- j. the pressure drop readings immediately after the corrective action was implemented; and



- k. the name(s) of the personnel who performed the work.

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

This range or limit on the pressure drop across each baghouse is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the permitted limit or range for the pressure drop based upon information obtained during future testing that demonstrate compliance with the allowable particulate emission rate for the controlled emissions unit(s). In addition, approved revisions to the range or limit will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of a minor permit modification.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

- (3) The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions of fugitive dust and visible particulate emissions from the stacks serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
  - a. the color of the emissions;
  - b. whether the emissions are representative of normal operations;
  - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
  - d. the total duration of any visible emissions incident; and
  - e. any corrective actions taken to eliminate the visible emissions.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

e) Reporting Requirements

- (1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.  
*(Authority for term: OAC rule 3745-15-03(A))*
- (2) The permittee shall submit quarterly deviation (excursion) reports that identify the following:
  - a. each period of time (start time and date, and end time and date) when the pressure drop across each baghouse was outside of the acceptable range;



- b. any period of time (start time and date, and end time and date) when the emissions unit(s) was/were in operation and the process emissions were not vented to the baghouse;
- c. each incident of deviation described in "a" (above) where a prompt investigation was not conducted;
- d. each incident of deviation described in "a" where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and
- e. each incident of deviation described in "a" where proper records were not maintained for the investigation and/or the corrective action(s), as identified in the monitoring and record keeping requirements of this permit.

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

- (3) The permittee shall submit semiannual written reports that (a) identify all days during which any visible emissions were observed from the stack serving these emissions units or any visible emissions of fugitive dust were observed and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the Akron RAQMD) by January 31 and July 31 of each year and shall cover the previous 6-month period.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

f) Testing Requirements

- (1) Compliance with the emission limitations in section b)(1) of these terms and conditions shall be determined in accordance with the following methods:

- a. Emission Limitation:

1% opacity for visible emissions (fugitive and stack emissions) (P922)

Applicable Compliance Method:

If required, compliance with the visible PE limitation shall be demonstrated through the results of visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

g) Miscellaneous Requirements

- (1) None



**14. Emissions Unit Group -Loading Racks: J001, J002, and J003**

EU ID	Operations, Property and/or Equipment Description
J001	Asphalt Loading Rack #1 Controlled with a Thermal Incinerator
J002	Asphalt Loading Rack #2 Controlled with a Thermal Incinerator
J003	Asphalt Loading Rack #3 Controlled with a Thermal Incinerator

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)  (PTI 16-02347, as effective 08/16/05)	See c)(2) below.
b.	OAC rule 3745-31-05(D)  (PTI 16-02347/P0106752 as effective 09/23/10)	The emissions from emissions unit J003 per rolling, 12-month period shall not exceed the following:  CO - 0.17 tons per year; VOC - 6.42 tons per year; SO <sub>2</sub> - 0.39 tons per year. PE/PM10 - 1.81 tons per year; and H <sub>2</sub> S - 0.02 tons per year.  See c)(3) below.
c.	OAC rule 3745-17-07(A)	Visible particulate emissions (PE) from the exhaust stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
d.	OAC rule 3745-17-07(B)	Visible PE of fugitive dust shall not exceed 20% opacity as a 3-minute average.
e.	OAC rule 3745-17-08(B)	The permittee shall employ overhead filling of tank-trucks to minimize or eliminate fugitive emissions.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
f.	OAC rule 3745-17-11	<p><b>For J001 and J002:</b> PE shall not exceed 47.53 pounds per hour (Based on process weight rate of 7.6 tph and Table I).</p> <p><b>For J003:</b> PE shall not exceed 2.7 pounds per hour (based on an uncontrolled mass emission rate for J003 of 13.3 pounds per hour and the use of Curve P-1 of Figure II)</p>
g.	OAC rule 3745-21-07(E)	<p>Exempt.</p> <p>Asphalt is not a photochemically reactive material, as defined in OAC rule 3745-21-01(C)(5).</p> <p>See b)(2)a. below.</p>
h.	40 CFR Part 63, Subpart LLLLL	<p><b>For J001 and J002:</b> Exempt. Group 2 asphalt loading racks. See c)(1) below.</p> <p><b>For J003:</b> Reduce total hydrocarbon mass emissions by 95%, or to a concentration of 20 ppmv, on a dry basis corrected to 3 percent oxygen; or</p> <p>route the emissions to a combustion device achieving a combustion efficiency of 99.5%.</p>
i.	40 CFR 63.1-15	Table 7 to Subpart LLLLL of 40 CFR Part 63 - Applicability of General Provisions to Subpart LLLLL shows which parts of the General Provisions in 40 CFR 63.1 - 15 apply to J003.

(2) Additional Terms and Conditions

- a. On February 18, 2008, OAC rule 3745-21-07 was revised in its entirety, therefore, the 21-07 rule that was in effect prior to this date is no longer part of the State requirements. On April 4, 2008, the rule revision was submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP); however, until the U.S. EPA approves the revision to OAC rule 3745-21-07, the requirement to comply with the previous 21-07 rule provisions still exists as part of the federally-approved SIP for Ohio.



b. All of the VOC emissions from this emissions unit shall be vented to the/a thermal incinerator that shall meet the operational, monitoring, and record keeping requirements of this permit, when the emissions unit is in operation.

c) Operational Restrictions

(1) The permittee shall not load asphalt with a temperature of 500 degrees F or greater, or with a true vapor pressure of 1.5 psia or greater in emissions units J001 and J002.

*(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR Part 63, Subpart LLLLLL)*

(2) The permittee shall operate only two (2) of the following emissions units simultaneously: J001, J002, and J003.

*(Authority for term: OAC rule 3745-31-05(D) and 3745-77-07(A)(1))*

(3) The asphalt throughput for emissions unit J003 shall not exceed 87,500 tons per year, based upon a rolling, 12-month summation of the monthly asphalt throughputs. The permittee has existing asphalt production records and, therefore, does not need to be limited to the first year monthly asphalt throughput amounts.

*(Authority for term: OAC rule 3745-31-05(D) and 3745-77-07(A)(1))*

(4) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable range established for the vacuum manifold static pressure is between 0.1 to 4.25 inches of water vacuum.

*(Authority for term: OAC rule 3745-31-05(D) and 3745-77-07(A)(1))*

(5) For J001 and J002: In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable average combustion temperature within the thermal incinerator, for any 3-hour block of time when J001 and/or J002 is/are in operation, shall not be less than 1450 degrees Fahrenheit or more than 50 degrees Fahrenheit below the average temperature measured during the most recent performance test that demonstrated the emissions unit(s) was/were in compliance.

*(Authority for term: OAC rule 3745-77-07(A)(1))*

(6) For J003: In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable average combustion temperature within the thermal incinerator, as a 3-hour average when J003 is in operation, shall not be less than the average temperature measured during the most recent performance test that demonstrated the emissions unit(s) was/were in compliance.

*(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR 63.8684(b))*

d) Monitoring and/or Recordkeeping Requirements

(1) For J001 and J002: The permittee shall properly install, operate, and maintain a continuous temperature monitor and recorder that measures and records the combustion temperature within the thermal incinerator when the emissions unit(s) is/are



in operation, including periods of startup and shutdown. Units shall be in degrees Fahrenheit. The accuracy for each thermocouple, monitor, and recorder shall be guaranteed by the manufacturer to be within  $\pm 1$  percent of the temperature being measured or  $\pm 5$  degrees Fahrenheit, whichever is greater. The temperature monitor and recorder shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and the operating manuals, with any modifications deemed necessary by the permittee. The permittee shall collect and record the following information each day the emissions unit(s) is/are in operation:

- a. all 3-hour blocks of time, when the emissions unit(s) controlled by the thermal incinerator was/were in operation, during which the average combustion temperature within the thermal incinerator was more than 50 degrees Fahrenheit below the average temperature measured during the most recent performance test that demonstrated the emissions unit(s) was/were in compliance; and
- b. a log (date and total time) of the downtime or bypass of the capture (collection) system and thermal incinerator, and/or downtime of the monitoring equipment, when the associated emissions unit(s) was/were in operation.

These records shall be maintained at the facility for a period of three years.

*(Authority for term: OAC rule 3745-77-07(C)(1))*

- (2) For J001 and J002: Whenever the monitored average combustion temperature within the thermal incinerator deviates from the range or limit established in accordance with this permit, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:

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

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range/limit specified in this permit, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

- f. a description of the corrective action;
- g. the date corrective action was completed;
- h. the date and time the deviation ended;



- i. the total period of time (in minutes) during which there was a deviation;
- j. the temperature readings immediately after the corrective action was implemented; and
- k. the name(s) of the personnel who performed the work.

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

The temperature range/limit is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the permitted temperature range/limit based upon information obtained during future performance tests that demonstrate compliance with the allowable emission rate(s) for the controlled pollutant(s). In addition, approved revisions to the temperature range/limit will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of a minor permit modification.

*(Authority for term: OAC rule 3745-77-07(C)(1))*

- (3) For J001 and J002: The permittee shall maintain daily records that document the maximum temperature and the maximum true vapor pressure of the asphalt loaded.

*(Authority for term: OAC rule 3745-77-07(C)(1))*

- (4) The permittee shall operate and maintain a continuous monitor and recorder which measures the static pressure in the vacuum manifold while the emissions unit is in operation. The monitoring equipment and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modification deemed necessary by the permittee. Exceedance of the normal operating static pressure range shall require shutdown, investigation of any problems and corrective action to enable operation in the normal range.

The permittee shall maintain monthly records which show the date(s) and time(s) when the vacuum manifold static pressure falls below normal operating levels.

*(Authority for term: OAC rule 3745-77-07(C)(1))*

- (5) The permittee shall maintain monthly records of the following information:
  - a. the asphalt throughput rates for J003, in tons, for each month;
  - b. operating times of emission units Loading Rack #1 (J001), Loading Rack #2 (J002), and Loading Rack #3 (J003);
  - c. the PE/PM10, H<sub>2</sub>S, CO, VOC, and SO<sub>2</sub> emissions for J003, in tons;
  - d. the rolling, 12-month summation of the asphalt monthly throughput rates for J003, in tons; and



- e. the rolling, 12-month summation of the PE/PM<sub>10</sub>, H<sub>2</sub>S, CO, VOC, and SO<sub>2</sub> emission rates for J003, in tons.

*(Authority for term: OAC rule 3745-77-07(C)(1))*

- (6) The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions of fugitive dust and any visible particulate emissions from the stacks serving these emissions units. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
  - a. the color of the emissions;
  - b. whether the emissions are representative of normal operations;
  - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
  - d. the total duration of any visible emissions incident; and
  - e. any corrective actions taken to eliminate the visible emissions.

*(Authority for term: OAC rule 3745-77-07(C)(1))*

- (7) For J003, the permittee shall maintain records of the combustion zone temperature\* data along with the 3-hour averages.

\*[The terms “combustion temperature” and “combustion zone temperature” have identical definitions. “Combustion zone temperature” has been used in instances that the applicable MACT citation is being cited.]

*(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.8694(c))*

- (8) The permittee must install, operate, and maintain each continuous parameter monitoring system (CPMS) for J003 according to the following:
  - a. the CPMS must complete a minimum of one cycle of operation for each successive 15-minute period;
  - b. to determine the 3-hour average, the permittee must:
    - i. have a minimum of four successive cycles of operation to have a valid hour of data;
    - ii. have valid data from at least four equally spaced data values for that hour from a CPMS that is not out-of-control according to the permittee’s site-specific monitoring plan; and
    - iii. determine the 3-hour average of all recorded readings for each operating day, except as stated in section 63.8690(c) (the permittee must have at



least two of the three hourly averages for that period using only hourly average values that are based on valid data(i.e., not from out-of-control periods)); and

- c. the permittee must record the results of each inspection, calibration, and validation check.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.8688(a))*

- (9) For each temperature monitoring device for J003, the permittee must meet the requirements of section d)(7) and the following:

- a. locate the temperature sensor in a position that provides a representative temperature;
- b. for a non-cryogenic temperature range, use a temperature sensor with a minimum measurement sensitivity of 2.8 degrees C or 1.0 percent of the temperature value, whichever is larger;
- c. if a chart recorder is used, it must have a sensitivity in the minor division of at least 20 degrees F;
- d. perform an accuracy check at least semiannually or following an operating parameter deviation;
  - i. according to the procedures in the manufacturer's documentation; or
  - ii. by comparing the sensor output to redundant sensor output; or
  - iii. by comparing the sensor output to the output from a calibrated temperature measurement device; or
  - iv. by comparing the sensor output to the output from a temperature simulator; and
- e. conduct accuracy checks any time the sensor exceeds the manufacturer's specified maximum operating temperature range or install a new temperature sensor; and
- f. at least quarterly or following an operating parameter deviation, perform visual inspections of components if redundant sensors are not used.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.8688(b))*

- (10) As an option to installing the CPMS specified in section d)(7) for J003, the permittee may install a continuous emissions monitoring system (CEMS) or a continuous opacity monitoring system (COMS) that meets the requirements specified in 40 CFR 63.8 and the applicable performance specifications of 40 CFR Part 60, Appendix B.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.8688(f))*



- (11) For each monitoring system for J003, the permittee must develop and make available for inspection by the permitting authority, upon request, a site-specific monitoring plan that addresses the following:
- a. installation of the CPMS, CEMS, or COMS sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (i.e., on or downstream of the last control device);
  - b. performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction system; and
  - c. performance evaluation procedures and acceptance criteria (i.e., calibrations).

*(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.8688(g))*

- (12) The site-specific monitoring plan for J003 must also address the following:
- a. ongoing operation and maintenance procedures in accordance with general requirements of sections 40 CFR 63.8(c)(1), (c)(3), (c)(4)(ii), (c)(7), and (c)(8);
  - b. ongoing data quality assurance procedures in accordance with the general requirements of section 40 CFR 63.8(d); and
  - c. ongoing record keeping and reporting procedures in accordance with the general requirements of sections 40 CFR 63.10(c), (e)(1), and (e)(2)(i).

*(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.8688(h))*

- (13) The permittee must conduct a performance evaluation of each CPMS, CEMS, or COMS in accordance with the site-specific monitoring plan for J003.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.8688(i))*

- (14) The permittee must operate and maintain the CPMS, CEMS, or COMS in continuous operation according to the site-specific monitoring plan for J003.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.8688(j))*

e) Reporting Requirements

- (1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

*(Authority for term: OAC rule 3745-15-03(A))*

- (2) The permittee shall submit quarterly deviation (excursion) reports that identify the following:



- a. all periods of time when more than 2 of the following emissions units operated simultaneously: J001, J002, J003;
- b. all exceedances of the rolling, 12-month asphalt throughput limitation for J003;
- c. all exceedances of the rolling, 12-month emissions limitations for J003;
- d. all periods of time during which the static pressure in the vacuum manifold exceeded the normal operating range; and

#### **Thermal Incinerator Requirements**

- e. For J001 and J002: each period of time (start time and date, and end time and date) when the average combustion temperature within the thermal incinerator was outside of the acceptable range(s);
- f. For J001 and J002: any period of time (start time and date, and end time and date) when the emissions unit(s) was/were in operation and the process emissions were not vented to the thermal incinerator;
- g. For J001 and J002: each incident of deviation described in "e" or "f" (above) where a prompt investigation was not conducted;
- h. For J001 and J002: each incident of deviation described in "e" or "f" where prompt corrective action, that would bring the emissions unit(s) into compliance and/or the temperature within the thermal incinerator into compliance with the acceptable range, was determined to be necessary and was not taken; and
- i. For J001 and J002: each incident of deviation described in "e" or "f" where proper records were not maintained for the investigation and/or the corrective action(s).

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

- (3) The permittee shall notify the Director (the Akron Regional AQMD) in writing if asphalt with a temperature of 500 degrees F or greater or with a true vapor pressure of 1.5 psia or greater is employed in emissions units J001 and J002. The notification shall include a copy of such record and shall be sent to the Director (the Akron Regional AQMD) within 45 days after such an occurrence.

*(Authority for term: OAC rule 3745-77-07(C)(1))*

- (4) The permittee shall submit annual reports that specify the total PE/PM10, SO<sub>2</sub>, CO, VOC, and H<sub>2</sub>S emissions from emissions unit J003 for the previous calendar year. These reports shall be submitted by April 15<sup>th</sup> of each year. This reporting requirement may be satisfied by including and identifying the specific emissions data in the annual Fee Emission Reports.



*(Authority for term: OAC rule 3745-77-07(C)(1))*

- (5) The permittee shall submit semiannual written reports that (a) identify all days during which any visible emissions were observed from the stacks serving these emissions units or any visible emissions of fugitive dust were observed and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the Akron RAQMD) by January 31 and July 31 of each year and shall cover the previous 6-month period.

*(Authority for term: OAC rule 3745-77-07(C)(1))*

- (6) The permittee shall submit compliance reports that contain the information required by 40 CFR 63.8693(c). The reports shall cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31. The compliance reports must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.8693(b)(3) & (b)(4))*

f) **Testing Requirements**

- (1) Compliance with the emission limitations in section b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. **Emission Limitation:**

Visible PE from the exhaust stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

**Applicable Compliance Method:**

If required, compliance with the visible PE limitation shall be demonstrated through the results of visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

*(Authority for term: OAC rule 3745-77-07(C)(1))*

b. **Emission Limitation:**

Visible PE of fugitive dust shall not exceed 20% opacity, as a 3-minute average.

**Applicable Compliance Method:**

If required, compliance with the visible PE limitation shall be demonstrated through the results of visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

*(Authority for term: OAC rule 3745-77-07(C)(1))*



c. Emission Limitations:

PE shall not exceed 47.53 pounds per hour each from J001 and J002. PE shall not exceed 2.7 pounds per hour from J003.

Applicable Compliance Method:

If required, compliance shall be determined based upon the results of emission testing conducted in accordance with Methods 1-5, of 40 CFR Part 60, Appendix A.

*(Authority for term: OAC rule 3745-77-07(C)(1))*

d. Emission Limitation:

For J003:

PE/PM10 shall not exceed 1.81 tons per year as a rolling, 12-month summation

H<sub>2</sub>S shall not exceed 0.02 tons per year as a rolling, 12-month summation

CO shall not exceed 0.17 tons per year as a rolling, 12-month summation

VOC shall not exceed 6.42 tons per year as a rolling, 12-month summation

SO<sub>2</sub> shall not exceed 0.39 tons per year as a rolling, 12-month summation

Applicable Compliance Method:

Compliance with the rolling 12-month limitations above shall be demonstrated as long as compliance with the rolling 12-month production/throughput limitation is maintained.

*(Authority for term: OAC rule 3745-77-07(C)(1))*

e. Emission Limitation:

For J003:

Reduce total hydrocarbon mass emissions by 95%, or to a concentration of 20 ppmv, on a dry basis corrected to 3 percent oxygen; or

route the emissions to a combustion device achieving a combustion efficiency of 99.5%.

Applicable Compliance Method:

To determine compliance with the total hydrocarbon percent reduction standard, use Equations 3 and 4 of this section as follows:

$$RE = [ (Mthci - Mthco) / (Mthci) ] * 100 \quad (\text{Eq. 3})$$



Where:

RE = Emission reduction efficiency, percent;

Mthci = Mass flow rate of total hydrocarbons entering the control device, kilograms per hour, determined using Equation 4; and

Mthco = Mass flow rate of total hydrocarbons exiting the control device, kilograms per hour, determined using Equation 4.

$$M_{thc} = C * Q * K \quad (\text{Eq. 4})$$

Where:

Mthc = Total hydrocarbon emission rate, kilograms per hour;

C = Concentration of total hydrocarbons on a dry basis, parts per million by volume (ppmv), as measured by the test method specified in Table 3 of 40 CFR Part 63, Subpart LLLLL; and

Q = Vent gas stream flow rate (dscmm) at a temperature of 20 degrees C as measured by the test method specified in Table 3 of 40 CFR Part 63, Subpart LLLLL; and

K = Unit conversion constant (3.00E-05) (ppmv)<sup>-1</sup> (gram-mole / standard cubic meter) (kilogram / gram) (minutes / hour), where standard temperature for gram-mole/standard cubic meter is 20 degrees C.

To determine compliance with the combustion efficiency standard, Equation 5 of this section must be used, as follows:

$$CE = [ 1 - (CO / CO_2) - (THC / CO_2) ] \quad (\text{Eq. 5})$$

Where:

CE = Combustion efficiency, percent;

CO = Carbon monoxide concentration at the combustion device outlet, in parts per million by volume (dry), as measured by the test method specified in Table 3 of 40 CFR Part 63, Subpart LLLLL;

CO<sub>2</sub> = Carbon dioxide concentration at the combustion device outlet, in parts per million by volume (dry), as measured by the test method specified in Table 3 of 40 CFR Part 63, Subpart LLLLL; and

THC = Total hydrocarbon concentration at the combustion device outlet, in parts per million by volume (dry), as measured by the test method specified in Table 3 of 40 CFR Part 63, Subpart LLLLL.



To determine compliance with the total hydrocarbon destruction efficiency standard for a combustion device that does not use auxiliary fuel, Equation 6 of this section must be used, as follows:

$$\text{THC DE} = [ (\text{CO} + \text{CO}_2) / (\text{CO} + \text{CO}_2 + \text{THC}) ] \text{ (Eq. 6)}$$

Where

THC DE = THC destruction efficiency, percent;

CO = Carbon monoxide concentration at the combustion device outlet, in parts per million by volume (dry), as measured by the test method specified in Table 3 of 40 CFR Part 63, Subpart LLLLL;

CO<sub>2</sub> = Carbon dioxide concentration at the combustion device outlet, in parts per million by volume (dry), as measured by the test method specified in Table 3 of 40 CFR Part 63, Subpart LLLLL; and

THC = Total hydrocarbon concentration at the combustion device outlet, in parts per million by volume (dry), as measured by the test method specified in Table 3 of 40 CFR Part 63, Subpart LLLLL.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.8687(e))*

- (2) The permittee shall conduct, or have conducted, emission testing for J003 in accordance with the following requirements:
- a. The emission testing shall be conducted within 12 months prior to the permit expiration.
  - b. The emission testing shall be conducted to demonstrate compliance with the total hydrocarbon/combustion efficiency requirements.
  - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

The test methods included in Table 3 of 40 CFR Part 63, Subpart LLLLL.

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. Compliance shall be based on comparing the results of the performance tests to the sum of the allowable emission limitations for the emissions units that vent to the thermal incinerator and were in operation during the performance test.
- e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the



proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

- f. 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.
- g. 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.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-15-04)*

g) Miscellaneous Requirements

- (1) None.



**15. Emissions Unit Group –MLA andMSA Group: P912, P913, and P915**

EU ID	Operations, Property and/or Equipment Description
P912	MLA System - MLA melt tank, MLA use tank, MLA filler hopper, MLA mix tank, MLA applicator pan (3-Wide roofing line) - controlled with MLA fiber bed filter and filler hopper dust collector.
P913	MSA System #1 - Sealant process controlled with a fiber bed filter - MSA melt tank, MSA use tank, and MSA applicator pan (3-wide roofing line) all controlled by MSA fiber bed filter
P915	MSA System #2 - Sealant process controlled with a fiber bed filter - MSA melt tank, MSA use tank, and MSA applicator pan (4-wide roofing line). MSA melt tank and MSA use tank controlled by Coater #2 fiber bed filter.

- a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:
- (1) None.
- b) Applicable Emissions Limitations and/or Control Requirements
- (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3), as effective 11/30/01  (PTI P0106935, as effective 10/7/2010)	<b>For P912:</b>  Volatile organic compound (VOC) emissions shall not exceed 3.86 pounds per hour, and 15.78 tons per year.  Particulate emissions (PE/PM10) shall not exceed 0.08 pound per hour, and 0.35 ton per year.  Carbon monoxide (CO) emissions shall not exceed 0.97 pound per hour, and 4.17 tons per year.  Hydrogen sulfide (H2S) emissions shall not exceed 0.36 pound per hour, and 1.58 tons per year.  See b)(2)c below.
b.	OAC rule 3745-31-05(A)(3), as effective 12/01/06	<b>For P912:</b>



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		See b)(2)d below.
c.	OAC rule 3745-31-05(A)(3)  (PTI P0106754, as effective 9/23/10)	<b>For P913:</b>  Visible PE from any stack shall not exceed 1% opacity, as a 6-minute average.  PE shall not exceed 3.48 pound per day and 0.54 tons per year.  VOC emissions shall not exceed 48.14 pounds per day and 8.71 tons per year.  CO emissions shall not exceed 14.79 pounds per day and 2.68 tons per year.
d.	OAC rule 3745-17-07(A)	Visible PE from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by rule. (P912 and P915)  The emission limitations specified by these rules are less stringent than the emissions limitations established pursuant to OAC rule 3745-31-05(A)(3). (P913)
e.	OAC rule 3745-17-07(B)	Visible PE of fugitive dust shall not exceed 20% opacity, as a 3-minute average.
f.	OAC rule 3745-17-08(B)	Emissions from the MLA system shall be vented to a fiber bed filter and/or dust collector (P912).  Vent emissions from MSA tanks to fiber bed filter. (P913 and P915)
g.	OAC rule 3745-17-11(B)	PE shall not exceed 4.94 pounds per hour. (based on process weight rate of 1.32 tons per hour and Table I) (See b)(2)e below.) (P912)  The emission limitations specified by these rules are less stringent than the emissions limitations established pursuant to OAC rule 3745-31-05(A)(3). (P912 and P913)  PE shall not exceed 7.08 pounds per



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		hour. (Based on process weight rate of 2.26 tph and Table I) (P915)
h.	40 CFR Part 63, Subpart LLLLL	<p>Limit total PE from the coater, coating mixer, filler mixer, sealant applicator, and adhesive applicator to 0.04 kilogram of particulate per megagram (kg/Mg) (0.8 lb/ton) of asphalt shingle or mineral-surfaced roll roofing produced.</p> <p>See sections c(1)-(2), d(2) through d(12), and e(4) below.</p>
i.	40 CFR 63.1-15	Table 7 to Subpart LLLLL of 40 CFR Part 63 - Applicability of General Provisions to Subpart LLLLL shows which parts of the General Provisions in 40 CFR 63.1 - 15 apply.
j.	OAC rule 3745-21-07(G)(2)	<p>Exempt.</p> <p>Asphalt is not a photochemically reactive material, as defined in OAC rule 3745-21-01(C)(5).</p> <p>See b)(2)f below.</p>

(2) Additional Terms and Conditions

- a. P913 and P915: The emissions from emissions unit P913 and the MSA tanks portion of emissions unit P915 shall be vented to the fiber bed filter at all times the emissions units are in operation.
- b. P912: The emissions from the MLA Melt Tank, MLS Use Tank, MLA Applicator, and MLA Mix Tank shall be vented to the fiber bed filter at all times the emissions unit is in operation. The emissions from the MLA Filler Hopper and MLA Mix Tank shall be vented to the dust collector at all times the emissions unit is in operation.
- c. P912: The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 265 changes), such that BAT is no longer required by State regulations for NAAQS pollutant less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA



approves the December 1, 2006 version of 3745-31-05, then these emission limits/control measures no longer apply.

- d. P912: This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan.

The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the CO and H<sub>2</sub>S emissions from this air contaminant source since the uncontrolled potential to emit for CO and H<sub>2</sub>S is less than 10 tons/year.

The BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to the PE/PM<sub>10</sub> emissions from this air contaminant source since the potential to emit, taking into account air pollution controls, for PM<sub>10</sub> is less than 10 tons/year.

- e. P912: Once US EPA approves the December 1, 2006 version of 3745-31-05, then the requirements of OAC rule 3745-17-11(B) become effective.
- f. On February 18, 2008, OAC rule 3745-21-07 was revised in its entirety; therefore, the 21-07 rule that was in effect prior to this date is no longer part of the State regulations. On April 4, 2008, the rule revision was submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP); however, until the U.S. EPA approves the revision to OAC rule 3745-21-07, the requirement to comply with the previous 21-07 rule provisions still exists as part of the federally-approved SIP for Ohio.

c) Operational Restrictions

- (1) None.

d) Monitoring and/or Recordkeeping Requirements

- (1) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable range established for the pressure drop across the fiber bed filter, as a 3-hour average when the emission unit(s) is/are in operation, shall not be more than 5 inches of water for the MLA fiber bed filter (P912), 4.9 inches of water for the MSA fiber bed filter (P913), and 7.9 inches of water for Coater #2 fiber bed filter (P915), or the pressure drop established during the most recent performance test that demonstrated the emission unit(s) was/were in compliance.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.6864(b))*

- (2) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable average inlet gas temperature, as a 3-hour average when the emissions unit(s) is/are in operation, shall not be more than 140 degrees Fahrenheit for the MLA fiber bed filter (P912), 115 degrees Fahrenheit for Coater #2 fiber bed filter (P915), and 136.3 degrees Fahrenheit for the MSA fiber bed filter (P913), or the temperature established during the most recent performance test that demonstrated the emissions unit(s) was/were in compliance.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.8684(b))*



- (3) The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions of fugitive dust and visible emissions from the stacks serving these emissions units. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
- a. the color of the emissions;
  - b. whether the emissions are representative of normal operations;
  - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
  - d. the total duration of any visible emissions incident; and
  - e. any corrective actions taken to eliminate the visible emissions.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

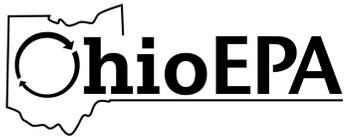
- (4) The permittee shall maintain records of the inlet gas temperature and pressure drop data along with the 3-hour averages of the inlet gas temperature and pressure drop.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.8694(c))*

- (5) The permittee must install, operate, and maintain each continuous parameter monitoring system (CPMS) according to the following:

- a. the CPMS must complete a minimum of one cycle of operation for each successive 15-minute period;
- b. to determine the 3-hour average, the permittee must:
  - i. have a minimum of four successive cycles of operation to have a valid hour of data;
  - ii. have valid data from at least four equally spaced data values for that hour from a CPMS that is not out-of-control according to the permittee's site-specific monitoring plan; and
  - iii. determine the 3-hour average of all recorded readings for each operating day, except as stated in section 63.8690(c) (the permittee must have at least two of the three hourly averages for that period using only hourly average values that are based on valid data (i.e., not from out-of-control periods)); and
- c. the permittee must record the results of each inspection, calibration, and validation check.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.8688(a))*



- (6) For each temperature monitoring device, the permittee must meet the requirements of section d)(4) and the following:
- a. locate the temperature sensor in a position that provides a representative temperature;
  - b. for a non-cryogenic temperature range, use a temperature sensor with a minimum measurement sensitivity of 2.8 degrees C or 1.0 percent of the temperature value, whichever is larger;
  - c. if a chart recorder is used, it must have a sensitivity in the minor division of at least 20 degrees F;
  - d. perform an accuracy check at least semiannually or following an operating parameter deviation;
    - i. according to the procedures in the manufacturer's documentation; or
    - ii. by comparing the sensor output to redundant sensor output; or
    - iii. by comparing the sensor output to the output from a calibrated temperature measurement device; or
    - iv. by comparing the sensor output to the output from a temperature simulator; and
  - e. conduct accuracy checks any time the sensor exceeds the manufacturer's specified maximum operating temperature range or install a new temperature sensor; and
  - f. at least quarterly or following an operating parameter deviation, perform visual inspections of components if redundant sensors are not used.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.8688(b))*

- (7) For each pressure measurement device, the permittee must meet the requirements of section d)(4) and the following:
- a. locate the pressure sensor(s) in, or as close as possible to, a position that provides a representative measurement of the pressure;
  - b. use a gauge with a minimum measurement sensitivity of 0.12 kiloPascals or a transducer with a minimum measurement sensitivity of 5 percent of the pressure range;
  - c. check pressure tap pluggage daily, and perform an accuracy check at least quarterly or following an operating parameter deviation:
    - i. according to the procedures in the manufacturer's documentation; or
    - ii. by comparing the sensor to redundant sensor output;



- d. conduct calibration checks any time the sensor exceeds the manufacturer's specified maximum operating pressure range or install a new sensor;
- e. at least monthly or following an operating parameter deviation, perform a leak check of all components for integrity, all electrical connections for continuity, and all mechanical connections for leakage; and
- f. at least quarterly or following an operating parameter deviation, perform visible inspections on all components if redundant sensors are not used.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.8688(c))*

- (8) For monitoring parameters other than temperature and pressure drop, the permittee must install and operate a CPMS to provide representative measurements of the monitored parameters.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.8688(d))*

- (9) As an option to installing the CPMS specified in section d)(4), the permittee may install a continuous emissions monitoring system (CEMS) or a continuous opacity monitoring system (COMS) that meets the requirements specified in 40 CFR 63.8 and the applicable performance specifications of 40 CFR Part 60, Appendix B.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.8688(f))*

- (10) For each monitoring system, the permittee must develop and make available for inspection by the permitting authority, upon request, a site-specific monitoring plan that addresses the following:

- a. installation of the CPMS, CEMS, or COMS sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (i.e., on or downstream of the last control device);
- b. performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction system; and
- c. performance evaluation procedures and acceptance criteria (i.e., calibrations).

*(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.8688(g))*

- (11) The site-specific monitoring plan must also address the following:

- a. ongoing operation and maintenance procedures in accordance with general requirements of sections 40 CFR 63.8(c)(1), (c)(3), (c)(4)(ii), (c)(7), and (c)(8);
- b. ongoing data quality assurance procedures in accordance with the general requirements of section 40 CFR 63.8(d); and



- c. ongoing record keeping and reporting procedures in accordance with the general requirements of sections 40 CFR 63.10(c), (e)(1), and (e)(2)(i).

*(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.8688(h))*

- (12) The permittee must conduct a performance evaluation of each CPMS, CEMS, or COMS in accordance with the site-specific monitoring plan.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.8688(i))*

- (13) The permittee must operate and maintain the CPMS, CEMS, or COMS in continuous operation according to the site-specific monitoring plan.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 374540 CFR 63.8688(j))*

- (14) The permittee shall maintain the following information for emissions unit P913, on a monthly basis:

- a. the company identification of the material stored in each tank;
- b. the number of squares coated per month;
- c. the amount of sealant applied per month, in pounds;
- d. the total MSA use (calculated by multiplying the pounds of sealant applied to each square times the number of squared coated per month), in pounds;
- e. the results of the monthly LEL reading for each tank;
- f. the estimate of vent flow, in cfm;
- g. the number of hours the emissions unit was in operation; and
- h. the OC and CO mass emission rates for the entire process, in pounds per day, calculated in accordance with sections f)(1)h and f)(1)i.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

e) Reporting Requirements

- (1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

*(Authority for term: OAC rule 3745-05-03(A))*

- (2) The permittee shall submit quarterly deviation (excursion) reports that identify the following:

- a. For P913, an identification of each month during which the calculated average daily VOC emissions exceeded 48.14 pounds per day, and the actual calculated average VOC emissions for each such day; and



- b. For P913, an identification of each month during which the calculated average daily CO emissions exceeded 14.79 pounds per day, and the actual calculated average CO emissions for each such day.

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

*(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))*

- (3) The permittee shall submit semiannual written reports that (a) identify all days during which any visible emissions were observed from the stacks serving these emissions units or any visible emissions of fugitive dust were observed and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the Akron RAQMD) by January 31 and July 31 of each year and shall cover the previous 6-month period.

*(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))*

- (4) The permittee shall submit compliance reports that contain the information required by 40 CFR 63.8693(c). The reports shall cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31. The compliance reports must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.8693(b)(3) & (b)(4))*

f) **Testing Requirements**

- (1) Compliance with the emission limitations in section b)(1) of these terms and conditions shall be determined in accordance with the following methods:

- a. **Emission Limitation:**

- Visible PE from any stack shall not exceed 20% opacity, as a 6-minute average. (emissions units P912 and P915)

- Visible PE from any stack shall not exceed 1% opacity, as a 6-minute average. (P913)

- Applicable Compliance Method:**

- If required, compliance with the visible PE limitation shall be demonstrated through the results of visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

*(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))*



b. Emission Limitation:

Visible PE of fugitive dust shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method:

If required, compliance with the visible PE limitation shall be demonstrated through the results of visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

*(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))*

c. Emission Limitations:

PE shall not exceed 7.08 pounds per hour. (P915)

PE shall not exceed 4.94 lbs PE/hr (P912)

PE/PM10 shall not exceed 0.08 pounds per hour, and 0.35 tons per year. (P912)

PE shall not exceed 3.48 pound per day and 0.54 tons per year. (P913)

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with the hourly limitation based upon the results of emission testing conducted in accordance with Methods 1 - 5, of 40 CFR Part 60, Appendix A.

For P912, the annual emission limitation was developed by multiplying the hourly mass emission limitation by 8760 hours per year, and then dividing by 2000. Therefore, compliance with the annual limitation shall be demonstrated if compliance with the hourly limitation is maintained.

For P913, the annual limitation was developed by multiplying the daily mass emission limitations for the tanks by 365 days per year, and multiplying the MSA Applicator Pan particulate emission factor (0.162 lb/ton shingle production) by the maximum allowable shingle production rate (492,080.4 tpy), and then dividing by 2000. Therefore, compliance with the annual limitation shall be demonstrated if compliance with the daily limitation is maintained.

*(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))*

d. Emission Limitations:

VOC emissions shall not exceed 3.86 lbs/hr and 15.78 tons per year. (P912)

Applicable Compliance Method:

Compliance with the hourly allowable VOC emission limitation shall be based upon the results of emission testing conducted in accordance with Methods 1



through 4 and 18 or 25/25A, as appropriate, of 40 CFR Part 60, Appendix A, in accordance with section f)(2).

Compliance with the annual limitation shall be ensured as long as compliance with the lb/hr limitation and the annual throughput/production limitations (as required for emissions unit P906) are maintained.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

e. Emission Limitations:

CO emissions shall not exceed 0.97 pound per hour and 4.17 tons per year. (P912)

Applicable Compliance Method:

If required, compliance with the hourly allowable CO emission limitation shall be based upon the results of emission testing conducted in accordance with Methods 1 through 4, and 10 or 10B, as appropriate, of 40 CFR Part 60, Appendix A.

Compliance with the annual limitation shall be demonstrated as long as compliance with the lb/hr limitation and the annual throughput/production limitations (as required for emissions unit P906) are maintained.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

f. Emission Limitations:

H<sub>2</sub>S emissions shall not exceed 0.36 pound per hour and 1.58 tons per year. (P912)

Applicable Compliance Method:

If required, compliance with the hourly allowable H<sub>2</sub>S emission limitation shall be based upon the results of emission testing conducted in accordance with Methods 1 through 4, and 11, as appropriate, of 40 CFR Part 60, Appendix A.

The annual emission limitation was developed by multiplying the hourly mass emission limitation by 8760 hours per year, and then dividing by 2000. Therefore, compliance with the annual limitation shall be demonstrated if compliance with the hourly limitation is maintained.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

g. Emission Limitation:

Limit total PE from the coater, coating mixer, filler mixer, sealant applicator, and adhesive applicator to 0.04 kilogram of particulate per megagram (kg/Mg) (0.8 lb/ton) of asphalt shingle or mineral-surfaced roll roofing produced.



Applicable Compliance Method:

To determine compliance with the particulates emission rate, use Equations 1 and 2 as follow:

$$E = Mpm / P \quad (\text{Eq. 1})$$

Where:

E = Particulate emissions, kilograms of particulate per megagram of roofing product manufactured;

Mpm = Particulate hourly emission rate, kilograms per hour, determined using Equation 2; and

P = The asphalt roofing product manufacturing rate during the emissions sampling period, including and material trimmed from the final product, megagram per hour.

$$Mpm = C * Q * K \quad (\text{Eq. 2})$$

Where:

Mpm = Particulate hourly emission rate, kilograms per hour;

C = concentration of particulate on a dry basis, grams per dry standard cubic meter (g/dscm), as measured by the test method specified in Table 3 of 40 CFR 63, Subpart LLLLLL;

Q = Vent gas steam flow rate (dry standard cubic meters per minute) at a temperature of 20 degrees C, as measure by the test method specified in Table 3 of 40 CFR 63, Subpart LLLLLL;

K = Unit conversion constant (0.06 minute-kilogram / hour-gram).

*(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))*

h. Emission Limitations:

VOC emissions shall not exceed 48.14 pounds per day and 8.71 tons per year. (P913)

Applicable Compliance Method:

Daily VOC emissions shall be calculated in accordance with the following methodology:

$$\text{VOC emissions (lb/day)} = \text{MSA Melt Tank} + \text{MSA Use} + \text{MSA Applicator Pan}$$

MSA Melt Tank and Use Tank VOC emissions are calculated using the following methodology:



*VOC emissions (lb/day) = VOC Concentration (lb/cf) \* Flow (scfm) \* (60 min/hr) \* (24 hr/day)*

*VOC conc. (lb/cf) = %LEL \* (1 - %THC) \* (LEL conc.) \* (28.32 L/cf) \* (lb/454,000 mg)*

Where:

%LEL = Lower Explosive Limit value, measured monthly by an instrument at each tank;

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

LEL conc. = 45 mg/L, value of the Lower Explosive Limit (100% LEL) expressed in a concentration that is constant for alkanes, (Industrial Explosive Prevention and Protection, Frank T. Bodurtha, pg 12, McGraw Hill, 1980); and

Flow = Estimate of vent flow, cfm.

MSA Applicator Pan VOC emissions are calculated using the following methodology:

*VOC emissions (lb/day) = THC EF (lb/ton asphalt as coater) \* Maximum Hourly Asphalt Throughput at Coater (tph) \* (24 hr/day)*

Where:

THC EF = 0.00431 lb/ton asphalt at coater (ARMA emission factor).

The annual limitation was developed by multiplying the daily mass emission limitations for the tanks by 365 days per year, and multiplying the MSA Applicator Pan THC emission factor by the maximum allowable asphalt usage rate (96,911.2 tpy), and then dividing by 2000. Therefore, compliance with the annual limitation shall be ensured if compliance with the daily limitation is maintained.

*(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))*

i. Emission Limitations:

CO emissions shall not exceed 18.79 pounds per day and 3.36 tons per year. (P913)

Applicable Compliance Method:

Daily CO emissions shall be calculated in accordance with the following methodology:

*CO emissions (lb/day) = MSA Melt Tank + MSA Use + MSA Applicator Pan*

MSA Melt Tank and Use Tank CO emissions are calculated using the following methodology:



$$CO \text{ (lbs/day)} = EF * LEL \text{ conc.} * 0.028 \text{ m}^3/\text{cf} * Flow * (g/1000 \text{ mg}) * (lb/453.59 \text{ g}) * 960 \text{ min/hr} * (24 \text{ hr/day})$$

Where:

EF = 1.14 mg/m<sup>3</sup>/ppm emission factor from AP-42 for CO;

LEL conc. = correlation of the concentration of CO based on the LEL of asphalt;  
= 31 \* %LEL + 570 for roofing asphalt; and

Flow = estimate of vent flow, cfm.

MSA Applicator Pan CO emissions are calculated as follows:

$$CO \text{ emissions (lb/day)} = CO \text{ EF (lb/ton asphalt at coater)} * (\text{Maximum Hourly Asphalt Throughput at Coater (tph)} * (24 \text{ hr/day}))$$

Where:

CO EF = 0.000904 lb/ton asphalt at coater (ARMA emission factor).

The annual limitation was developed by multiplying the daily mass emission limitations for the tanks by 365 days per year, and multiplying the MSA Applicator Pan CO emission factor by the maximum allowable asphalt usage rate (96,911.2 tpy) and then dividing by 2000. Therefore, compliance with the annual limitation shall be demonstrated if compliance with the daily limitation is maintained.

*(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))*

(2) 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 12 months prior to the permit expiration.
- b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for PE and VOC (VOC for P912 only).
- c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

for PE, the test methods included in Table 3 of 40 CFR Part 63, Subpart LLLLLL; and

for VOC, Methods 1 through 4, and 18 or 25/25A, as appropriate, of 40 CFR Part 60, Appendix A.

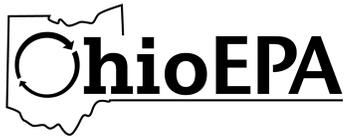
Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.



- d. The test(s) shall be conducted while 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. Compliance shall be based on comparing the results of the performance tests to the sum of the allowable emission limitations for the emissions units that vent to the fiber bed filters and were in operation during the performance test.
- e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).
- f. 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.
- g. 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.

*(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))*

- g) Miscellaneous Requirements
  - (1) None



**16. Emissions Unit Group -Surfacing/Unwind Group: P905, P909, P914, and P916**

EU ID	Operations, Property and/or Equipment Description
P905	Material Surfacing Applicator #1 - Application of surfacing materials (i.e., granules and backdust) on the laminate (3-Wide) roofing line controlled with two baghouses (Roofing line dust collector and 3-Wide process dust collector).
P909	Material Surfacing Applicator #2 - Application of surfacing materials (i.e., granules and backdust) on the strip (4-Wide) roofing line controlled with two baghouses (4-Wide process dust collector and roofing line dust collector).
P914	Mat Unwind #1 - Unwinding of mat prior to dry looper on the laminate (3-Wide) roofing line controlled with a baghouse (3-Wide process dust collector)
P916	Mat Unwind #2 - Unwinding of mat prior to dry looper on the strip (4-Wide) roofing line controlled with a baghouse (4-Wide process dust collector)

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)  (PTI P0106755, as effective 09/14/10 and PTI P0106752, as effective 09/23/2010)	See Section B)(7).
b.	OAC rule 3745-31-05(F)	See Section B)(8).
c.	OAC rule 3745-17-07(A)	Visible particulate emissions (PE) from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
d.	OAC rule 3745-17-07(B)	Visible PE of fugitive dust shall not exceed 20% opacity, as a 3-minute average.
e.	OAC rule 3745-17-08	The unwind area shall be vented to a fabric filter through the use of localized hoods and/or exhaust pickups. (P914 and P916)  The applicator shall be adequately



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		enclosed and vented to a baghouse to minimize or eliminate fugitive emissions. (P905 and P909)
f.	OAC rule 3745-17-11(B)	The emission limitation based on this rule is less stringent than the limit established pursuant to OAC rule 3745-31-05(A)(3) and/or OAC rule 3745-31-05(F). (P905, P909, P914, and P916)

(2) Additional Terms and Conditions

a. The emissions from these emissions units shall be vented to a fabric filter/baghouse at all times the emissions units are in operation.

c) Operational Restrictions

None..

d) Monitoring and/or Recordkeeping Requirements

(1) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable range established for the pressure drop across each fabric filter/baghouse is between the following:

Dust Collector	Pressure Drop Range (inches of water)
3-Wide Roofing Line Dust Collector	0.1 - 12.5
4-Wide Roofing Line Dust Collector	0.1 - 12.5
Roofing Line Dust Collector	0.1 - 12.5

*(Authority for term: OAC rule 3745-77-07(C)(1))*

(2) The permittee shall properly install, operate, and maintain equipment to continuously monitor the pressure drop, in inches of water, across each fabric filter/baghouse when the controlled emissions unit(s) is/are in operation, including periods of startup and shutdown. The permittee shall record the pressure drop across each fabric filter/baghouse on a daily basis. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee.



Whenever the monitored value for the pressure drop deviates from the limit or range established in accordance with this permit, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:

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

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified in this permit, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

- f. a description of the corrective action;
- g. the date corrective action was completed;
- h. the date and time the deviation ended;
- i. the total period of time (in minutes) during which there was a deviation;
- j. the pressure drop readings immediately after the corrective action was implemented; and
- k. the name(s) of the personnel who performed the work.

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

This range or limit on the pressure drop across each fabric filter/baghouse is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the permitted limit or range for the pressure drop based upon information obtained during future testing that demonstrate compliance with the allowable particulate emission rate for the controlled emissions unit(s). In addition, approved revisions to the range or limit will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of a minor permit modification.

*(Authority for term: OAC rule 3745-77-07(C)(1))*



- (3) The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit and any visible emissions of fugitive dust. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
- a. the location and color of the emissions;
  - b. whether the emissions are representative of normal operations;
  - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
  - d. the total duration of any visible emission incident; and
  - e. any corrective actions taken to eliminate the visible emissions.

*(Authority for term: OAC rule 3745-77-07(C)(1))*

e) Reporting Requirements

- (1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

*(Authority for term: OAC rule 3745-15-03(A))*

- (2) The permittee shall submit quarterly deviation (excursion) reports that identify the following:
- a. each period of time (start time and date, and end time and date) when the pressure drop across any fabric filter/baghouse was outside of the acceptable range;
  - b. any period of time (start time and date, and end time and date) when the emissions unit(s) was/were in operation and the process emissions were not vented to a fabric filter/baghouse;
  - c. each incident of deviation described in "a" (above) where a prompt investigation was not conducted;
  - d. each incident of deviation described in "a" where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and
  - e. each incident of deviation described in "a" where proper records were not maintained for the investigation and/or the corrective action(s), as identified in the monitoring and record keeping requirements of this permit.



The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

*(Authority for term: OAC rule 3745-77-07(C)(1))*

- (3) The permittee shall submit semiannual written reports that (a) identify all days during which any visible emissions were observed from the stack serving this emissions unit or any visible emissions of fugitive dust were observed and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the Akron RAQMD) by January 31 and July 31 of each year and shall cover the previous 6-month period.

*(Authority for term: OAC rule 3745-77-07(C)(1))*

f) Testing Requirements

- (1) Compliance with the emission limitations in section b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

Visible PE from any stack shall not exceed 20% opacity, as a 6-minute average.

Applicable Compliance Method:

If required, compliance with the visible PE limitation shall be demonstrated through the results of visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

*(Authority for term: OAC rule 3745-77-07(C)(1))*

b. Emission Limitation:

Visible PE of fugitive dust shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method:

If required, compliance with the visible PE limitation shall be demonstrated through the results of visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

*(Authority for term: OAC rule 3745-77-07(C)(1))*

g) Miscellaneous Requirements

- (1) None.



**17. Emissions Unit Group -Tank Group: T001, T004, T005, T014, T015, T016, T017, T018, T019, T020, and T021**

<b>EU ID</b>	<b>Operations, Property and/or Equipment Description</b>
T001	Asphalt Storage Tank #25 - 245,000 Gallons controlled with fiber bed filter (A or B)
T004	Asphalt Storage Tank #24 - 245,000 Gallons controlled with fiber bed filter (A or B)
T005	Asphalt Storage Tank #23 - 345,000 Gallons controlled with fiber bed filter (A or B)
T014	Asphalt Storage Tank #26 - 29,000 Gallons controlled with a fiber bed filter (C)
T015	Asphalt Storage Tank #27 - 29,000 Gallons controlled with a fiber bed filter (C)
T016	Asphalt Storage Tank #30 - 18,500 Gallons controlled with a fiber bed filter (D)
T017	Asphalt Storage Tank #31 - 18,500 Gallons controlled with a fiber bed filter (D)
T018	Asphalt Storage Tank #40 - 18,000 Gallons controlled with a fiber bed filter (E)
T019	Asphalt Storage Tank #41 - 18,000 Gallons controlled with a fiber bed filter (E)
T020	Asphalt Storage Tank #42 - 18,000 Gallons controlled with a fiber bed filter (E)
T021	Asphalt Storage Tank #32 - 18,500 Gallons controlled with a fiber bed filter (D)

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-21-09(L)	Exempt.  Storage tank capacity is less than 40,000 gallons (T014-T021)  Asphalt has a vapor pressure less than 1.52 pounds per square inch absolute (T001, T004, T005).
b.	40 CFR 63, Subpart LLLLL	0% opacity for exhaust gases, except for one consecutive 15-minute period in any 24-hour period when the storage tank transfer lines are being cleaned.
c.	40 CFR 63.1-15	Table 7 to Subpart LLLLL of 40 CFR Part 63 - Applicability of General Provisions to Subpart LLLLL shows which parts of the General Provisions in 40 CFR 63.1 - 15 apply.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
d.	OAC rule 3745-17-11(B)	<p>PE shall not exceed 54.07 pounds per hour. (Based on a process weight rate of 131.5 tons per hour and Table I) (T014 and T015)</p> <p>PE shall not exceed 54.27 pounds per hour. (Based on a process weight rate of 134.1 tons per hour and Table I) (T016, T017, T021)</p> <p>PE shall not exceed 54.46 pounds per hour. (Based on a process weight rate of 136.6 tons per hour and Table I) (T001, T004, T005, T018, T019, T020)</p>
e.	OAC rule 3745-17-07(A)	The emission limitations specified by these rules are less stringent than the emissions limitations established pursuant to 40 CFR 63, Subpart LLLLLL.
f.	40 CFR Part 60, Subpart K-Kb	Not subject. See b)(2)a.
g.	40 CFR Part 60, Subpart UU	Not subject. See b)(2)b.

(2) Additional Terms and Conditions

- a. Each tank was constructed prior to June 11, 1973. As such, each tank is not subject to 40 CFR 60, Subpart K, Ka, or Kb. Each tank will become subject to 40 CFR 60, Subpart Kb only upon modification or reconstruction as defined in 40 CFR 60, Subpart A.
- b. Each tank was constructed prior to November 18, 1980. As such, each tank is not subject to 40 CFR 60, Subpart UU. Each tank will become subject to 40 CFR 60, Subpart UU only upon modification or reconstruction as defined in 40 CFR 60, Subpart A.

c) Operational Restrictions

- (1) T001, T004, and T005: The permittee shall not place, store, or hold in this fixed roof tank any petroleum liquid that, as stored, has a true vapor pressure greater than 1.52 pounds per square inch absolute, unless the tank is equipped with an internal floating roof (or equivalent control approved by the Director) in accordance with the requirements of paragraph (L)(1) of OAC rule 3745-21-09 prior to storing a petroleum liquid with a higher vapor pressure.

*(Authority for term: OAC rule 3745-21-09(L)(1) and 3745-77-07(A)(1))*



d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
  - a. the color of the emissions;
  - b. whether the emissions are representative of normal operations;
  - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
  - d. the total duration of any visible emissions incident; and
  - e. any corrective actions taken to eliminate the visible emissions.

*(Authority for term: OAC rule 3745-77-07(C)(1))*

- (2) The permittee shall maintain records of the following information for T001, T004, and T005:
  - 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 petroleum liquid that has a maximum true vapor pressure greater than 1.0 pound per square inch absolute.

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

*(Authority for term: OAC rule 3745-21-09(L)(3) and 3745-77-07(C)(1))*

e) Reporting Requirements

- (1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

*(Authority for term: OAC rule 3745-15-03(A))*

- (2) The permittee shall submit semiannual written reports that identify:
  - a. all days during which any visible particulate emissions were observed from the stack serving this emissions unit; and
  - b. any corrective actions taken to minimize or eliminate the visible particulate emissions.



These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

- (3) The permittee shall submit compliance reports that contain the information required by 40 CFR 63.8693(c). The reports shall cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31. The compliance reports must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3) and 40 CFR 63.8693(b)(3) & (b)(4))*

- (4) T001, T004, T005: If the permittee places, stores, or holds, in the fixed roof tank, any petroleum liquid with a true vapor pressure that is greater than 1.52 pounds per square inch absolute and such tank does not comply with the requirements of paragraph (L)(1) of OAC rule 3745-21-09, the permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days of becoming aware of the occurrence. The date that such petroleum liquid was first stored in the tank, the date removed (if removed), the total gallons throughput of each petroleum liquid exceeding this vapor pressure, and the proposed method of compliance shall be included in the report.

*(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-21-09(L)(4))*

f) Testing Requirements

- (1) Compliance with the emission limitations in section b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

Visible emissions shall not exceed 0% opacity for exhaust gases.

Applicable Compliance Method:

If required, compliance with the visible PE limitation shall be demonstrated through the results of visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

*(Authority for term: OAC rule 3745-77-07(C)(1))*

g) Miscellaneous Requirements

- (1) None.



**18. Emissions Unit Group -Tank Group: T008, T026, T031, T032, and T033**

EU ID	Operations, Property and/or Equipment Description
T008	Asphalt Storage Tank #52 - 30,000-gallon asphalt storage tank, controlled with a thermal incinerator
T026	Asphalt Storage Tank #28 - 29,000-gallon asphalt storage tank, controlled with a thermal incinerator
T031	Asphalt Storage Tank #51 - 29,600-gallon asphalt storage tank, controlled with a thermal incinerator
T032	Asphalt Storage Tank #59 - 29,600-gallon asphalt storage tank, controlled with a thermal incinerator
T033	Asphalt Storage Tank #67 - 29,600-gallon asphalt storage tank, controlled with a thermal incinerator

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)  (P0106753, as effective 09/14/10)	<b>For T031:</b>  Sulfur dioxide (SO <sub>2</sub> ) emissions shall not exceed 2.01 tons per year.  Carbon monoxide (CO) emissions shall not exceed 0.07 tons per year.  Organic compound (OC) emissions shall not exceed 1.0 tons per year.  Particulate emissions (PE) shall not exceed 0.3 tons per year.
b.	OAC rule 3745-31-05(A)(3)  (PTI 16-01952, as effective 09/29/99)	<b>From each tank (T032 &amp; T033):</b>  Volatile organic compound (VOC) emissions shall not exceed 0.60 tons per year.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		PE shall not exceed 0.17 tons per year.  CO shall not exceed 0.49 tons per year.  Hydrogen sulfide (H <sub>2</sub> S) shall not exceed 0.07 tons per year.  SO <sub>2</sub> shall not exceed 2.65 tons per year.
c.	OAC rule 3745-17-07(A)	The emission limitations specified by these rules are less stringent than the emissions limitations established pursuant to 40 CFR 63, Subpart LLLLL.
d.	OAC rule 3745-17-11	PE shall not exceed 54.27 pounds per hour from each tank. (Based on a process weight rate of 134.06 tons per hour and Table I)
e.	OAC rule 3745-21-09(L)(2)	Exempt, storage capacity less than 40,000 gallons.
f.	40 CFR Part 60, Subpart Kb	Exempt, storage capacity greater than or equal to 75 m <sup>3</sup> (19,813 gal), but less than 151 m <sup>3</sup> (39,890 gal) and stores a liquid with a maximum true vapor pressure less than 15.0 kPa (2.17 psia). (T026, T031, T032, T033)
g.	40 CFR Part 60, Subpart Ka	T008: Exempt See b)(2)d.
h.	40 CFR Part 63, Subpart LLLLL	0% opacity for exhaust gases, except for one consecutive 15-minute period in any 24-hour period when the storage tank transfer lines are being cleaned. The control device shall not be bypassed during this 15-minute period.
i.	40 CFR 63.1-15	Table 7 to Subpart LLLLL of 40 CFR Part 63 - Applicability of General Provisions to Subpart LLLLL shows which parts of the General Provisions in 40 CFR 63.1 - 15 apply.
j.	40 CFR Part 60, Subpart UU	See b)(2)c.

(2) Additional Terms and Conditions

- a. T031, T032 and T033: The fixed roof storage tank shall be equipped with a submerged fill.
- b. T031, T032 and T033: All of the OC emissions from this emissions unit shall be vented to the thermal incinerator that shall meet the operational, monitoring, and



record keeping requirements of this permit, when the emissions unit is in operation.

- c. In accordance with 40 CFR 63.8681(b), asphalt storage tanks subject to the provisions of both 40 CFR 60, Subpart UU and 40 CFR 63, Subpart LLLLLL are required to comply only with the provisions of 40 CFR 63, Subpart LLLLLL.
- d. T008 is exempt from the requirements of 40 CFR 60, Subpart Ka because it has a storage capacity less than 40,000 gallons.

c) Operational Restrictions

- (1) None.

d) Monitoring and/or Recordkeeping Requirements

- (1) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable average combustion temperature within the thermal incinerator, for any 3-hour block of time when the emissions unit(s) controlled by the thermal incinerator is/are in operation, shall not be less than 1450 degrees Fahrenheit or more than 50 degrees Fahrenheit below the average temperature measured during the most recent performance test that demonstrated the emissions unit(s) was/were in compliance.

[Note: These Group 2 tanks are not subject to 40 CFR 63, Subpart LLLLLL continuous temperature monitoring requirements. However, the thermal incinerator(s) that these tanks exhaust to also control(s) emission sources subject to 40 CFR 63, Subpart LLLLLL that are subject to more stringent temperature monitoring requirements.]

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

- (2) The permittee shall properly install, operate, and maintain a continuous temperature monitor and recorder that measures and records the combustion temperature within the thermal incinerator when the emissions unit(s) is/are in operation, including periods of startup and shutdown. Units shall be in degrees Fahrenheit. The accuracy for each thermocouple, monitor, and recorder shall be guaranteed by the manufacturer to be within  $\pm 1$  percent of the temperature being measured or  $\pm 5$  degrees Fahrenheit, whichever is greater. The temperature monitor and recorder shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and the operating manuals, with any modifications deemed necessary by the permittee. The permittee shall collect and record the following information each day the emissions unit(s) is/are in operation:

- a. all 3-hour blocks of time, when the emissions unit(s) controlled by the thermal incinerator was/were in operation, during which the average combustion temperature within the thermal incinerator was less than 1450 degrees Fahrenheit or more than 50 degrees Fahrenheit below the average temperature measured during the most recent performance test that demonstrated the emissions unit(s) was/were in compliance; and



- b. a log (date and total time) of the downtime or bypass of the capture (collection) system and thermal incinerator, and/or downtime of the monitoring equipment, when the associated emissions unit(s) was/were in operation.

These records shall be maintained at the facility for a period of three years.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

- (3) Whenever the monitored average combustion temperature within the thermal incinerator deviates from the range or limit established in accordance with this permit, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:

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

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range/limit specified in this permit, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

- f. a description of the corrective action;
- g. the date corrective action was completed;
- h. the date and time the deviation ended;
- i. the total period of time (in minutes) during which there was a deviation;
- j. the temperature readings immediately after the corrective action was implemented; and
- k. the name(s) of the personnel who performed the work.

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

The temperature range/limit is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the permitted temperature range/limit based upon information obtained during future performance tests.



that demonstrate compliance with the allowable emission rate(s) for the controlled pollutant(s). In addition, approved revisions to the temperature range/limit will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of a minor permit modification.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

- (4) T031, T032, and T033: The permittee shall maintain a record showing the dimensions of this vessel and an analysis showing the capacity. This record shall be kept for the life of the emissions unit.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

- (5) The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

- a. the color of the emissions;
- b. whether the emissions are representative of normal operations;
- c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
- d. the total duration of any visible emissions incident; and
- e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emissions incident has occurred. The observer does not have to document the exact start and end times for the visible emissions incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emissions incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

e) Reporting Requirements

- (1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

*(Authority for term: OAC rule 3745-15-03(A))*



- (2) The permittee shall submit quarterly deviation (excursion) reports that identify the following:
- a. each period of time (start time and date, and end time and date) when the average combustion temperature within the thermal incinerator was outside of the acceptable range;
  - b. any period of time (start time and date, and end time and date) when the emissions unit(s) was/were in operation and the process emissions were not vented to the thermal incinerator;
  - c. each incident of deviation described in "a" or "b" (above) where a prompt investigation was not conducted;
  - d. each incident of deviation described in "a" or "b" where prompt corrective action, that would bring the emissions unit(s) into compliance and/or the temperature within the thermal incinerator into compliance with the acceptable range, was determined to be necessary and was not taken; and
  - e. each incident of deviation described in "a" or "b" where proper records were not maintained for the investigation and/or the corrective action(s).

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

- (3) The permittee shall submit semiannual written reports that identify:
- a. all days during which any visible particulate emissions were observed from the stack serving this emissions unit; and
  - b. any corrective actions taken to minimize or eliminate the visible particulate emissions.

These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

- (4) The permittee shall submit compliance reports that contain the information required by 40 CFR 63.8693(c). The reports shall cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31. The compliance reports must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.8693(b)(3) & (b)(4))*



f) Testing Requirements

(1) Compliance with the emission limitations in section b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

SO<sub>2</sub> emissions shall not exceed 2.01 tons per year. (T031)

Applicable compliance Method:

Compliance with the SO<sub>2</sub> emission limitation shall be determined as specified in the document entitled "Asphalt Tank with Fume Incinerator Calculations" submitted in the permit to install application number 16-01825.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

b. Emission Limitation:

CO emissions shall not exceed 0.07 tons per year. (T031)

Applicable compliance Method:

Annual CO emissions shall be calculated in accordance with the following methodology:

$$CO (tpy) = EF * X ppm * 0.028 m^3/cf * Y CFM * (lb/454,000 mg) * (60 min/hr) * (8,760 hr/yr) * (1 ton/2000 lbs) * (1 - CE)$$

Where:

EF = 1.14 mg/m<sup>3</sup>/ppm emission factor from AP-42 for CO;

CE = 95% control efficiency from the thermal incinerator;

X ppm = correlation of the concentration of CO based on the LEL of asphalt

=1,190 ppm for oxidized asphalt (maximum concentration as an annual average); and

Y CFM = estimate of vent flow, 60 cfm.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

c. Emission Limitation:

OC emissions shall not exceed 1.0 tons per year. (T031)



Applicable compliance Method:

Compliance with the OC emission limitation shall be determined as specified in the document entitled "Asphalt Tank with Fume Incinerator Calculations" submitted in the permit to install application number 16-01825.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

d. Emission Limitation:

PE shall not exceed 0.3 tons per year. (T031)

Applicable compliance Method:

Compliance with the PE limitation shall be determined as specified in the document entitled "Asphalt Tank with Fume Incinerator Calculations" submitted in the permit to install application number 16-01825.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

e. Emission Limitation:

0% opacity for exhaust gases, except for one consecutive 15-minute period in any 24-hour period when the storage tank transfer lines are being cleaned.

Applicable compliance Method:

If required, the permittee shall demonstrate compliance with the visible PE limitation in accordance with Method 9 of 40 CFR Part 60, Appendix A.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

f. Emission Limitation:

PE shall not exceed 54.27 pounds per hour. (T008, T026, T031, T032, and T033)

Applicable compliance Method:

If required, compliance with the hourly mass emissions limitation shall be determined by the results of emission testing in accordance with Methods 1-5, of 40 CFR Part 60, Appendix A.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

g. Emission Limitation:

VOC emissions shall not exceed 0.60 tons per year. (T032) (T033)

Applicable compliance Method:

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



Where:

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

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

*(Authority for term: OAC rule 3745-77-07(C)(1))*

h. Emission Limitation:

PE shall not exceed 0.17 ton per year. (T032) (T033)

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 the results of stack testing in accordance with Method 5 of 40 CFR Part 60, Appendix A.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

i. Emission Limitation:

CO shall not exceed 0.49 per year. (T032) (T033)



Applicable compliance Method:

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

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

(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))

j. Emission Limitation:

H<sub>2</sub>S shall not exceed 0.07 per year. (T032) (T033)

Applicable compliance Method:

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

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.

$$\text{Controlled H}_2\text{S emissions (tpy)} = \text{H}_2\text{S emissions (lb/yr)} * (1 - \text{control efficiency}) * (\text{capture efficiency}) * (\text{ton}/2,000 \text{ lbs})$$



Where:

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

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

k. Emission Limitation:

SO<sub>2</sub> shall not exceed 2.65 per year. (T032) (T033)

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

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

g) Miscellaneous Requirements

(1) None.



**19. Emissions Unit Group -Tank Group: T006 and T011**

EU ID	Operations, Property and/or Equipment Description
T006	100,000 gallon cutback solvent storage tank controlled with a water-cooled vapor condenser
T011	100,000 gallon cutback asphalt and cutback solvent storage tank controlled with a water-cooled vapor condenser

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)  (PTI P0115547)	Organic compound (OC) emissions shall not exceed 0.34 tons per year. (T006)  OC emissions shall not exceed 0.66 tons per year. (T011)
b.	OAC rule 3745-21-09(L)(1)	Exempt.  Cutback solvents and cutback asphalt have a vapor pressure less than 1.52 pounds per square inch absolute.
c.	40 CFR Part 60, Subpart Ka	T006: Exempt from requirements See b)(2)b.  T011: See b)(2)c and d)(4)
d.	40 CFR Part 60, Subpart UU	Not subject. See b)(2)d

(2) Additional Terms and Conditions

a. The fixed roof storage tank shall be equipped with a submerged fill pipe and all of the OC emissions from this emissions unit shall be vented to the/a condenser that shall meet the operational, monitoring, and record keeping requirements of this permit, when the emissions unit is in operation, except as provided by section c)(3).

b. T006 is exempt from the requirements of 40 CFR Part 60, Subpart Ka, because it stores a petroleum liquid with a Reid vapor pressure and maximum vapor



pressure of less than 6.9 kPa (1.0 psia), in accordance with 40 CFR 60.115a(d)(1) or because it does not store a petroleum liquid.

- c. T011 does not store a petroleum liquid which as stored has a true vapor pressure equal to or greater than 10.3 kPa (1.5 psia). As such, T011 is not subject to the VOC emission standards per 40 CFR 60.112a(a).
- d. Cutback solvents and cutback asphalt tanks do not meet the definition of asphalt storage tanks in 40 CFR 60.471. Therefore, T006 and T011 are not subject to the requirements of 40 CFR Part 60, Subpart UU

c) Operational Restrictions

- (1) The permittee shall not place, store, or hold in this fixed roof tank any petroleum liquid that, as stored, has a true vapor pressure greater than 1.52 pounds per square inch absolute, unless the tank is equipped with an internal floating roof (or equivalent control approved by the Director) in accordance with the requirements of paragraph (L)(1) of OAC rule 3745-21-09 prior to storing a petroleum liquid with a higher vapor pressure.

*(Authority for term: OAC rule 3745-21-09(L)(1) and 3745-77-07(A)(1))*

- (2) The permittee is not required to operate the condenser during cutback solvent unloading when the ambient temperature is less than 45 degrees F.

*(Authority for term: OAC rule 3745-77-07(A)(1))*

- (3) All openings, except stub drains, shall be equipped with a cover, seal, or lid which is to be in the closed position at all times, except when in actual use for tank gauging or sampling.

*(Authority for term: OAC rule 3745-77-07(A)(1))*

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall maintain records of the following information for the fixed roof tank:
  - 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 petroleum liquid that has a maximum true vapor pressure greater than 1.0 pound per square inch absolute.

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

*(Authority for term: OAC rule 3745-21-09(L)(3) and 3745-77-07(C)(1))*

- (2) The temperature of the water exiting from the condenser, when the emission unit(s) controlled by the condenser is/are in operation, shall not exceed 87 degrees Fahrenheit.

*(Authority for term: OAC rule 3745-77-07(A)(1))*



- (3) The permittee shall properly install, operate, and maintain a continuous temperature monitor and recorder which measures and records the temperature of the water exiting from the condenser when the emissions unit(s) is/are in operation, including periods of startup and shutdown. Units shall be in degrees Fahrenheit. The accuracy for each thermocouple, monitor, and recorder shall be guaranteed by the manufacturer to be within  $\pm 1$  percent of the temperature being measured or  $\pm 5$  degrees Fahrenheit, whichever is greater. The temperature monitor and recorder shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals, with any modifications deemed necessary by the permittee. The permittee shall collect and record the following information each day the emissions unit(s) is/are in operation:
- a. all periods of time, when the emissions unit(s) controlled by the condenser was/were in operation, during which the temperature of the water exiting from the condenser exceeded the range established during the most recent performance test that demonstrated the emissions unit(s) was/were in compliance; and
  - b. a log or record of operating time for the capture (collection) system, condenser, monitoring equipment, and the associated emissions unit(s).

These records shall be maintained at the facility for a period of three years.

*(Authority for term: OAC rule 3745-77-07(C)(1))*

- (4) Whenever the monitored temperature of the outlet water exiting from the condenser deviates from the range/limit established in accordance with this permit, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:
- a. the date and time the deviation began;
  - b. the magnitude of the deviation at that time;
  - c. the date the investigation was conducted;
  - d. the name(s) of the personnel who conducted the investigation; and
  - e. the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range/limit specified in this permit, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

- f. a description of the corrective action;
- g. the date corrective action was completed;
- h. the date and time the deviation ended;



- i. the total period of time (in minutes) during which there was deviation;
- j. the temperature readings of the exhaust gas from condenser immediately after the corrective action was implemented; and
- k. the name(s) of the personnel who performed the work.

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

The exhaust gas temperature range/limit is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the permitted outlet water temperature range/limit based upon information obtained during future performance tests that demonstrate compliance with the allowable VOC emission rate for the controlled emissions unit(s). In addition, approved revisions to the exhaust gas temperature range/limit will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of a minor permit modification.

*(Authority for term: OAC rule 3745-77-07(C)(1))*

- (5) For T011, the permittee shall maintain a record of the petroleum liquid stored, the period of storage, and the maximum true vapor pressure of that liquid during the respective storage period.

*(Authority for term: 40 CFR 60.115a(a))*

e) Reporting Requirements

- (1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

*(Authority for term: OAC rule 3745-15-03(A))*

- (2) The permittee shall submit quarterly deviation (excursion) reports that identify the following:
  - a. each period of time (start time and date, and end time and date) when the temperature of the outlet water from the condenser was outside of the acceptable range;
  - b. any period of time (start time and date, and end time and date) when the emissions unit(s) was/were in operation and the process emissions were not vented to the condenser;
  - c. each incident of deviation described in "a" or "b" (above) where a prompt investigation was not conducted;



- d. each incident of deviation described in “a” or “b” where prompt corrective action, that would bring the emissions unit(s) into compliance and/or the temperature of the outlet water exiting from the condenser into compliance with the acceptable range, was determined to be necessary and was not taken; and
- e. each incident of deviation described in “a” or “b” where proper records were not maintained for the investigation and/or the corrective action(s).

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

*(Authority for term: OAC rule 3745-77-07(C)(1))*

- (3) If the permittee places, stores, or holds, in the fixed roof tank, any petroleum liquid with a true vapor pressure that is greater than 1.52 pounds per square inch absolute and such tank does not comply with the requirements of paragraph (L)(1) of OAC rule 3745-21-09, the permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days of becoming aware of the occurrence. The date that such petroleum liquid was first stored in the tank, the date removed (if removed), the total gallons throughput of each petroleum liquid exceeding this vapor pressure, and the proposed method of compliance shall be included in the report.

*(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-21-09(L)(4))*

f) Testing Requirements

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

- a. Emission Limitations:

OC emissions shall not exceed 0.34 tons per year. (T006)

OC emissions shall not exceed 0.66 tons per year. (T011)

Applicable Compliance Method:

Compliance with the annual mass emissions limitation shall be demonstrated through the results of calculations performed using the most recent version of USEPA’s “Tanks Program” or AP-42 emission factors for working and breathing loss calculations.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

g) Miscellaneous Requirements

- (1) None.



**20. Emissions Unit Group -Tank Group: T007, T027, T029, and T030**

EU ID	Operations, Property and/or Equipment Description
T007	Asphalt Storage Tank #50 - 60,000 gallon asphalt storage tank controlled with a thermal incinerator
T027	Asphalt Storage Tank #29 - 100,000 gallon asphalt storage tank controlled with a thermal incinerator
T029	Asphalt Storage Tank #44 - 400,000 gallon asphalt storage tank controlled with a thermal incinerator
T030	Asphalt Storage Tank #36 - 100,000 gallon asphalt storage tank controlled with a thermal incinerator

- a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:
- (1) None.
- b) Applicable Emissions Limitations and/or Control Requirements
- (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)  (P0106755, as effective 9/14/10)	<b>For T030:</b>  Particulate emissions (PE/PM10) shall not exceed 0.11 pound per hour, and 0.48 ton per year.  Sulfur dioxide (SO2) emissions shall not exceed 1.51 pounds per hour, and 6.61 tons per year.  Carbon monoxide (CO) emissions shall not exceed 0,32 pound per hour, and 1.40 tons per year.  Volatile organic compound (VOC) emissions shall not exceed 0.40 pound per hour, and 1.75 tons per year.
b.	OAC rule 3745-31-05(A)(3)  (P0103910, as effective 10/9/08)	<b>For T027:</b>  Particulate emissions (PE) shall not exceed 0.21 ton per year.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		<p>Sulfur dioxide (SO<sub>2</sub>) emissions shall not exceed 1.24 tons per year.</p> <p>Carbon monoxide (CO) emissions shall not exceed 0.15 ton per year.</p> <p>Volatile organic compound (VOC) emissions shall not exceed 0.74 ton per year.</p>
c.	<p>OAC rule 3745-31-05(A)(3)  (P0103645, as effective 07/15/08)</p>	<p><b>For T029:</b></p> <p>PE shall not exceed 0.06 ton per year.</p> <p>SO<sub>2</sub> emissions shall not exceed 0.94 ton per year.</p> <p>CO emissions shall not exceed 0.07 ton per year.</p> <p>VOC emission shall not exceed 0.21 ton per year.</p>
d.	<p>OAC rule 3745-31-05(A)(3)  (PTI 16-02347, as effective 8/16/05)</p>	<p><b>For T007:</b></p> <p>Particulate emissions (PE/PM<sub>10</sub>) shall not exceed 0.01 pound per hour, and 0.06 ton per year.</p> <p>Sulfur dioxide (SO<sub>2</sub>) emissions shall not exceed 0.21 pound per hour.</p> <p>Carbon monoxide (CO) emissions shall not exceed 0.02 pound per hour.</p> <p>Volatile organic compound (VOC) emissions shall not exceed 0.05 pound per hour.</p> <p>Hydrogen sulfide (H<sub>2</sub>S) emissions shall not exceed 0.006 pound per hour and 0.03 ton per year.</p> <p>See Section B)(17)-(18) for the fossil fuel combustion emission limits for the thermal incinerators.</p>
e.	<p>OAC rules 3745-31-13 through 3745-31-20</p>	<p>The emissions from T007 shall not exceed the following, based upon rolling,</p>



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		12-month summations:  CO - 0.07 ton per year; VOC - 0.21 ton per year; and SO2 - 0.94 ton per year.  The overall control efficiency (including capture and control) shall not be less than 95% for CO and VOC for T007.
f.	OAC rule 3745-17-07(A)	The emission limitations specified by these rules are less stringent than the emissions limitations established pursuant to 40 CFR 60, Subpart UU.
g.	OAC rule 3745-17-11(B)	The emission limitations specified by these rules are less stringent than the emissions limitations established pursuant to OAC rule 3745-31-05(A)(3). (T007 & T030)  PE shall not exceed 54.27 pounds per hour. (based on a process weight rate of 134.06 tons per hour and Table I) (T027 & T029)
h.	OAC rule 3745-21-09(L)(1)	Exempt.  Asphalt has a vapor pressure less than 1.52 pounds per square inch absolute. See c)(3).
i.	40 CFR Part 60, Subpart Kb	95% VOC control efficiency.  See b)(2)c below.
j.	40 CFR Part 60, Subpart UU	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.
k.	40 CFR Part 63, Subpart LLLLLL	Exempt pursuant to 40 CFR 63,8681(c) since subject to 40 CFR Part 60, Subpart Kb.

(2) Additional Terms and Conditions

- a. T030: The emissions unit shall be equipped with a submerged fill pipe and shall be vented to a thermal incinerator to control asphalt fumes.



- b. T027 and T029: The emissions unit shall be equipped with a submerged fill pipe.
- c. The permittee shall employ a closed vent system and control device meeting the following specifications:
  - i. The closed vent system shall be designed to collect all VOC vapors and gases discharged from the storage vessel and operated with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background and visual inspections, as determined in 40 CFR Part 60, Subpart VV Section 60.485(b).
  - ii. The control device shall be designated and operated to reduce inlet VOC emissions by 95 percent or greater.
- c) Operational Restrictions
  - (1) The permittee of each source that is equipped with a closed vent system and control device as required in Section 60.112b(a)(3) or (b)(2) of 40 CFR Part 60 (other than a flare) is exempt from Section 60.8 of the General Provisions and shall meet the following requirements:
    - a. Submit for approval by the Administrator as an attachment to the notification required by Section 60.7(a)(1) of 40 CFR Part 60, or if the facility is exempt from Section 60.7(a)(1) of 40 CFR Part 60, as an attachment to the notification required by Section 60.7(a)(2) of 40 CFR Part 60, an operating plan containing the information listed below.
      - i. Documentation demonstrating that the control device will achieve the required control efficiency during maximum loading conditions. This documentation is to include a description of the gas stream which enters the control device, including flow and VOC content under varying liquid conditions (dynamic and static) and manufacturer's design specifications for the control device. If the control device or the closed vent capture system receives vapors, gases, or liquids other than fuels from sources that are not designated sources under this subpart, the efficiency demonstration is to include consideration of all vapors, gases, and liquids received by the closed vent capture system and control device. If an enclosed combustion device with a minimum residence time of 0.75 second and a minimum temperature of 816 degrees Celsius is used to meet the 95 percent requirement, documentation that those conditions will exist is sufficient to meet the requirements of this paragraph.
      - ii. A description of the parameter or parameters to be monitored to ensure that the control device will be operated in conformance with its design and an explanation of the criteria used for selection of that parameter (or parameters).
    - b. Operate the closed vent system and control device and monitor the parameters of the closed vent system and control device in accordance with the operating plan submitted to the Administrator in accordance with paragraph (a) of this



section, unless the plan was modified by the Administrator during the review process. In this case, the modified plan applies.

*(Authority for term: OAC rule 3745-77-07(A)(1) and 3745-31-05(A)(3))*

- (2) The permittee shall not place, store, or hold in this fixed roof tank any petroleum liquid which, as stored, has a true vapor pressure greater than 1.52 pounds per square inch absolute, unless such tank is designed or equipped in accordance with the requirements of paragraph (L)(1) of OAC rule 3745-21-09.

*(Authority for term: OAC rule 3745-77-07(A)(1) and OAC rule 3745-21-09(L)(1))*

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

- (1) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable average combustion temperature within the thermal incinerator, for any 3-hour block of time when the emissions unit(s) controlled by the thermal incinerator is/are in operation, shall not be less than 1450 degrees Fahrenheit or more than 50 degrees Fahrenheit below the average temperature measured during the most recent performance test that demonstrated the emissions unit(s) was/were in compliance.

[Note: These tanks are exempt from 40 CFR 63, Subpart LLLLL requirements. However, the PCC and JZ thermal incinerators also control emission sources subject to 40 CFR 63, Subpart LLLLL that are subject to more stringent temperature monitoring requirements.]

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

- (2) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable range established for the static pressure in the duct downstream of the JZ thermal incinerator is between -2.5 to 0.8 inches of water when T007 is in operation, and the acceptable range established for the static pressure in the duct downstream of the PCC thermal incinerator is between 0.1 to 12 inches of water, vacuum, when T007 is in operation.

*(Authority for term: OAC rule 3745-31-05(A)(3) and 3745-77-07(C)(1))*

- (3) The permittee shall properly install, operate, and maintain a continuous temperature monitor and recorder that measures and records the combustion temperature within the thermal incinerator when the emissions unit(s) is/are in operation, including periods of startup and shutdown. Units shall be in degrees Fahrenheit. The accuracy for each thermocouple, monitor, and recorder shall be guaranteed by the manufacturer to be within  $\pm 1$  percent of the temperature being measured or  $\pm 5$  degrees Fahrenheit, whichever is greater. The temperature monitor and recorder shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and the operating manuals, with any modifications deemed necessary by the permittee. The permittee shall collect and record the following information each day the emissions unit(s) is/are in operation:



- a. all 3-hour blocks of time, when the emissions unit(s) controlled by the thermal incinerator was/were in operation, during which the average combustion temperature within the thermal incinerator was less than 1450 degrees Fahrenheit or more than 50 degrees Fahrenheit below the average temperature measured during the most recent performance test that demonstrated the emissions unit(s) was/were in compliance; and
- b. a log (date and total time) of the downtime or bypass of the capture (collection) system and thermal incinerator, and/or downtime of the monitoring equipment, when the associated emissions unit(s) was/were in operation.

These records shall be maintained at the facility for a period of three years.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

- (4) Whenever the monitored average combustion temperature within the thermal incinerator deviates from the range or limit established in accordance with this permit, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:
  - a. the date and time the deviation began;
  - b. the magnitude of the deviation at that time;
  - c. the date the investigation was conducted;
  - d. the name(s) of the personnel who conducted the investigation; and
  - e. the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range/limit specified in this permit, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

- f. a description of the corrective action;
- g. the date corrective action was completed;
- h. the date and time the deviation ended;
- i. the total period of time (in minutes) during which there was a deviation;
- j. the temperature readings immediately after the corrective action was implemented; and
- k. the name(s) of the personnel who performed the work.



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

The temperature range/limit is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the permitted temperature range/limit based upon information obtained during future performance tests that demonstrate compliance with the allowable emission rate(s) for the controlled pollutant(s). In addition, approved revisions to the temperature range/limit will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of a minor permit modification.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

- (5) The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
- a. the color of the emissions;
  - b. whether the emissions are representative of normal operations;
  - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
  - d. the total duration of any visible emissions incident; and
  - e. any corrective actions taken to eliminate the visible emissions.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

- (6) For T007 and T030: The permittee shall maintain records of the following information for the fixed roof tank:
- 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 petroleum liquid that has a maximum true vapor pressure greater than 1.0 pound per square inch absolute.

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

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

- (7) The permittee shall keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel for the life of the emissions unit.



*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

- (8) The permittee shall operate and maintain a continuous monitor and recorder which measures the static pressure in the duct downstream of the thermal incinerator while T007 is in operation. The monitoring equipment and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modification deemed necessary by the permittee. Exceedance of the normal operating static pressure range shall require shutdown, investigation of any problems and corrective action to enable operation in the normal range.

The permittee shall maintain monthly records which show the date(s) and time(s) when the static pressure in the duct downstream of the thermal incinerator falls below normal operating levels when T007 was in operation.

*(Authority for term: OAC rule 3745-77-07(C)(1))*

- (9) The permittee shall maintain monthly records of the following information for T007:
- a. the CO, VOC, and SO<sub>2</sub> emissions, in tons, from both the tank (T007) and products of combustion of the thermal incinerator for each month based upon the results of the latest stack test; and
  - b. the rolling, 12-month summation of CO, VOC, and SO<sub>2</sub> emissions in tons from both the tank (T007) and products of combustion of the thermal incinerator.

*(Authority for term: OAC rule 3745-77-07(C)(1))*

e) Reporting Requirements

- (1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

*(Authority for term: OAC rule 3745-15-03(A))*

- (2) The permittee shall submit quarterly deviation (excursion) reports that identify the following:
- a. For T007: all exceedances of the rolling, 12-month CO, VOC, and SO<sub>2</sub> emissions limitations from both the tank and products of combustion of the thermal incinerator;
  - b. For T007: all periods of time during which the static pressure in the duct downstream of the thermal incinerator exceeded the normal operating range; and

**Thermal Incinerator Requirements**

- c. each period of time (start time and date, and end time and date) when the average combustion temperature within the thermal incinerator was outside of the acceptable range;



- d. any period of time (start time and date, and end time and date) when the emissions unit(s) was/were in operation and the process emissions were not vented to the thermal incinerator;
- e. each incident of deviation described in "a" or "b"(above) where a prompt investigation was not conducted;
- f. each incident of deviation described in "a" or "b" where prompt corrective action, that would bring the emissions unit(s) into compliance and/or the temperature within the thermal incinerator into compliance with the acceptable range, was determined to be necessary and was not taken; and
- g. each incident of deviation described in "a" or "b" where proper records were not maintained for the investigation and/or the corrective action(s).

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

- (3) The permittee shall submit semiannual written reports that (a) identify all days during which any visible emissions were observed from the stack service this emissions unit or any visible emissions of fugitive dust were observed and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the Akron RAQMD) by January 31 and July 31 of each year and shall cover the previous 6-month period.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

- (4) If the permittee places, stores, or holds, in the fixed roof tank, any petroleum liquid with a true vapor pressure that is greater than 1.52 pounds per square inch absolute and such tank does not comply with the requirements of paragraph (L)(1) of OAC rule 3745-21-09, the permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days of becoming aware of the occurrence. The date that such petroleum liquid was first stored in the tank, the date removed (if removed), the total gallons throughput of each petroleum liquid exceeding this vapor pressure, and the proposed method of compliance shall be included in the report.

*(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-21-09(L)(4))*

f) Testing Requirements

- (1) Compliance with the emission limitations in section b)(1) of these terms and conditions shall be determined in accordance with the following methods:
  - a. Emissions Limitations:
    - PE/PM10 shall not exceed 0.01 pound per hour, and 0.06 ton per year. (T007)
    - PE/PM10 shall not exceed 0.11 pound per hour, and 0.48 ton per year. (T030)



PE shall not exceed 0.21 ton per year. (T027)

PE shall not exceed 0.06 ton per year. (T029)

Applicable Compliance Method:

If required, compliance with the hourly limitations for T007 and T030 shall be determined through the results of testing in accordance with Methods 1 - 5 of 40 CFR Part 60, Appendix A.

For annual emissions, compliance shall be determined based on the following equation:

*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.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

b. Emissions Limitations:

SO2 emissions shall not exceed 1.51 pounds per hour, and 6.61 tons per year. (T030)

SO2 emissions shall not exceed 1.24 tons per year. (T027)

SO2 emissions shall not exceed 0.94 ton per year. (T029)

SO2 emissions shall not exceed 0.21 pound per hour, and 0.94 tons per year based upon a rolling, 12-month summation (T007).

Applicable Compliance Method:

If required, compliance with the hourly limitation for T030 or T007 shall be determined through the results of emission testing conducted in accordance with Methods 1 through 4, and 6 or 6C of 40 CFR Part 60, Appendix A.

*SO2 emissions (tpy) = [Uncontrolled H2S emissions (tpy) – Controlled H2S emission (tpy)] \* 1.88*

Where

*Uncontrolled H2S emissions (tpy) = EF \* C \* (0.028 m3/cf) \* (lb/454,000 mg) \* Flow \* (60 min/hr) \* (8,760 hr/yr) / 2000 (lb/ton)*

Where

EF = 1.39 mg/m3/ppm emission factor from AP-42 for H2S;



- C = pollutant concentration (ppm) from correlation of concentration of H2S based on the LEL of asphalt = 2.5\* %LEL + 340 for roofing or oxidized asphalt
- = 515 ppm (T027)
- = 390 ppm (T029) (T030) (T007);
  
- Flow = vent flow (cfm)
- = 60 cfm.

*Controlled H2S emissions (tpy) = Uncontrolled H2S emissions (tpy) \* (1-control efficiency) \* (capture efficiency)*

Where

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

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

c. Emissions Limitations:

CO emissions shall not exceed 0.32 pound per hour, and 1.40 tons per year. (T030)

CO emissions shall not exceed 0.15 ton per year. (T027)

CO emissions shall not exceed 0.07 ton per year. (T029)

CO emissions shall not exceed 0.02 pounds per hour, and 0.07 tons per year as a rolling, 12-month summation. (T007)

Applicable Compliance Method:

*Uncontrolled CO emissions (tpy) = EF \* C \* (0.028 m3/cf) \* (lb/454,000 mg) \* Flow \* (60 min/hr) \* (8,760 hr/yr) / 2000 (lb/ton)*

Where

- EF = 1.14 mg/m3/ppm emission factor from AP-42 for H2S;
  
- C = pollutant concentration (ppm) from correlation of concentration of CO based on the LEL of asphalt = 31\* %LEL + 570 for roofing or oxidized asphalt
- = 2740 ppm (T027)
- = 1190 ppm (T029) (T030) (T007);
  
- Flow = vent flow (cfm)
- = 60 cfm.



*Controlled CO emissions (tpy) = Uncontrolled CO emissions (tpy) \* (1-control efficiency) \* (capture efficiency)*

Where

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

If required, compliance with the hourly limitation for T030 or T007 shall be determined through the results of testing in accordance with Methods 1 through 4, and 10 of 40 CFR Part 60, Appendix A.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

d. Emissions Limitations:

VOC emissions shall not exceed 0.40 pound per hour, and 1.75 tons per year. (T030)

VOC emissions shall not exceed 0.74 ton per year. (T027)

VOC emissions shall not exceed 0.21 ton per year. (T029)

VOC emissions shall not exceed 0.05 pounds per hour, and 0.21 tons per year as a rolling, 12-month summation (T007).

Applicable Compliance Method:

*Uncontrolled VOC emissions (tpy) = VOC Concentration (lb/cf) \* Flow \* (60 min/hr) \* (8,760 hr/yr) / 2000 (lb/ton)*

Where

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

%LEL = Lower Explosive Limit for the tank  
 = 0.70 (T027)  
 = 0.20 (T029) (T030) (T007);

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

100%LEL conc. = 45 mg/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) = Uncontrolled VOC emissions (tpy) \* (1-control efficiency) \* (capture efficiency)*

Where

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

If required, compliance with the hourly limitation for T030 or T007 shall be determined through the results of testing in accordance with Methods 1 through 4, and 25/25A of 40 CFR Part 60, Appendix A.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

e. Emission Limitations:

H2S emissions shall not exceed 0.006 pounds per hour, and 0.03 tons per year as a rolling, 12-month summation (T007).

Applicable Compliance Method:

*Uncontrolled H2S emissions (tpy) = EF \* C \* (0.028 m3/cf) \* (lb/454,000 mg) \* Flow \* (60 min/hr) \* (8,760 hr/yr) / 2000 (lb/ton)*

Where

EF = 1.39 mg/m3/ppm emission factor from AP-42 for H2S;

C = pollutant concentration (ppm) from correlation of concentration of H2S based on the LEL of asphalt = 2.5\* %LEL + 340 for roofing or oxidized asphalt  
 = 390 ppm (T027)

Flow = vent flow (cfm)  
 = 60 cfm.

*Controlled H2S emissions (tpy) = Uncontrolled H2S emissions (tpy) \* (1-control efficiency) \* (capture efficiency)*

Where

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

If required, compliance with the hourly H2S limitation shall be demonstrated through the results of stack testing performed in accordance with Methods 1 - 4, and 15 of 40 CFR Part 60, Appendix A..

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*



f. Emission Limitation:

95% overall control efficiency for CO and VOC (T007)

Applicable Compliance Method:

If required, compliance with the control efficiency limitation shall be demonstrated through the results of stack testing performed in accordance with Methods 1 - 4 and 18 or 25/25A, as appropriate, for VOC and 10 or 10B for CO of 40 CFR Part 60, Appendix A, and in accordance with the test methods and procedures specified in 3745-21-10.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

g. Emissions Limitation:

0% opacity, except for one consecutive 15-minute period in any 24-hour period when the transfer lines are being blown for cleaning.

Applicable Compliance Method:

If required, compliance with the visible PE limitation shall be determined through the results of visible emission observations performed in accordance with Method 9 of 40 CFR Part 60, Appendix A.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

h. Emissions Limitation:

Reduce inlet VOC emissions by 95 percent or greater.

Applicable Compliance Method:

Compliance with the limitation shall be determined through the results of emission testing conducted on the incinerator(s) to demonstrate compliance with either the 99.5% combustion efficiency, 20 ppmv total hydrocarbon outlet, or 95% total hydrocarbon mass emissions reduction requirement pursuant to 40 CFR 63, Subpart LLLLLL.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

(2) 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 12 months prior to the permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the total hydrocarbon/combustion efficiency requirements of 40 CFR Part 63 Subpart LLLLLL.



- c. The following test method(s) shall be employed to demonstrate compliance with the total hydrocarbon/combustion efficiency requirements:

The test methods included in Table 3 of 40 CFR Part 63, Subpart LLLLLL.

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. Compliance shall be based on comparing the results of the performance tests to the sum of the allowable emission limitations for the emissions units that vent to the thermal incinerator and were in operation during the performance test.
- e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).
- f. 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.
- g. 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.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

- g) Miscellaneous Requirements
  - (1) None



**21. Emissions Unit Group -Tank Group: T010, T012, T013, T022, and T023**

EU ID	Operations, Property and/or Equipment Description
T010	Cutback Solvent Storage Tank #60 - 28,600 Gallons, Controlled with Water-Cooled Vapor Condenser
T012	Cutback Asphalt and Cutback Solvent Storage Tank #65 - 28,600 Gallons, Controlled with Water-Cooled Vapor Condenser
T013	Cutback Asphalt and Cutback Solvent Storage Tank #66 - 28,600 Gallons, Controlled with Water-Cooled Vapor Condenser
T022	Cutback Asphalt and Cutback Solvent Storage Tank #64 - 28,600 Gallons, Controlled with Water-Cooled Vapor Condenser
T023	Cutback Asphalt and Cutback Solvent Storage Tank #63 - 28,600 Gallons, Controlled with Water-Cooled Vapor Condenser

- a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:
- (1) None.
- b) Applicable Emissions Limitations and/or Control Requirements
- (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)  (PTI P0115547)	Organic compound (OC) emissions shall not exceed 0.20 ton per year. (T010)  OC emissions shall not exceed 1.79 tons per year. (T012)  OC emissions shall not exceed 1.13 tons per year. (T013)  OC emissions shall not exceed 2.38 tons per year. (T022)  OC emissions shall not exceed 2.80 tons per year. (T023)
b.	OAC rule 3745-21-09(L)(2)	Exempt.  Storage tank capacity is less than 40,000 gallons.
c.	40 CFR Part 60, Subpart Ka	Exempt.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		See b)(2)b.
d.	40 CFR Part 60, Subpart UU	Not subject, see b)(2)c

(2) Additional Terms and Conditions

- a. The fixed roof storage tank shall be equipped with a submerged fill pipe and all of the OC emissions from this emissions unit shall be vented to the/a condenser that shall meet the operational, monitoring, and record keeping requirements of this permit, when the emissions unit is in operation, except as provided by section c)(2).
- b. T010, T012, T013, T022, and T023 are exempt from the requirements of 40 CFR Part 60, Subpart Ka because each has a storage capacity less than 40,000 gallons.
- c. Cutback asphalt and cutback solvent storage tanks do not meet the definition of asphalt storage tanks in 40 CFR 60.471. As such, T010, T012, T013, T022, and T023 are not subject to the requirements of 40 CFR 60, Subpart UU.

c) Operational Restrictions

- (1) The temperature of the water exiting from the condenser, when the emission unit(s) controlled by the condenser is/are in operation, shall not exceed 87 degrees Fahrenheit.  
*(Authority for term: OAC rule 3745-77-07(A)(1))*
- (2) The permittee is not required to operate the condenser during cutback solvent unloading when the ambient temperature is less than 45 degrees F.  
*(Authority for term: OAC rule 3745-77-07(A)(1))*
- (3) All openings, except stub drains, shall be equipped with a cover, seal, or lid which is to be in the closed position at all times, except when in actual use for tank gauging or sampling.  
*(Authority for term: OAC rule 3745-77-07(A)(1))*
- (4) The permittee shall not place, store, or hold in emissions unit T023 any petroleum liquid which, as stored, has a maximum true vapor pressure greater than 2.17 pounds per square inch absolute (15.0 kPa).  
*(Authority for term: OAC rule 3745-77-07(A)(1) and 3745-31-015(A)(3))*

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall properly install, operate, and maintain a continuous temperature monitor and recorder which measures and records the temperature of the water exiting from the condenser when the emissions unit(s) is/are in operation, including periods of



startup and shutdown. Units shall be in degrees Fahrenheit. The accuracy for each thermocouple, monitor, and recorder shall be guaranteed by the manufacturer to be within  $\pm 1$  percent of the temperature being measured or  $\pm 5$  degrees Fahrenheit, whichever is greater. The temperature monitor and recorder shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals, with any modifications deemed necessary by the permittee. The permittee shall collect and record the following information each day the emissions unit(s) is/are in operation:

- a. all periods of time, when the emissions unit(s) controlled by the condenser was/were in operation, during which the temperature of the water exiting from the condenser exceeded the range established during the most recent performance test that demonstrated the emissions unit(s) was/were in compliance; and
- b. a log or record of operating time for the capture (collection) system, condenser, monitoring equipment, and the associated emissions unit(s).

These records shall be maintained at the facility for a period of three years.

*(Authority for term: OAC rule 3745-77-07(C)(1))*

- (2) Whenever the monitored temperature of the outlet water exiting from the condenser deviates from the range/limit established in accordance with this permit, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:

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

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range/limit specified in this permit, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

- f. a description of the corrective action;
- g. the date corrective action was completed;
- h. the date and time the deviation ended;
- i. the total period of time (in minutes) during which there was deviation;



- j. the temperature readings of the exhaust gas from condenser immediately after the corrective action was implemented; and
- k. the name(s) of the personnel who performed the work.

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

The exhaust gas temperature range/limit is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the permitted outlet water temperature range/limit based upon information obtained during future performance tests that demonstrate compliance with the allowable VOC emission rate for the controlled emissions unit(s). In addition, approved revisions to the exhaust gas temperature range/limit will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of a minor permit modification.

*(Authority for term: OAC rule 3745-77-07(C)(1))*

- (3) The permittee shall maintain records of the following information for T023:
  - 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.

*(Authority for term: OAC rule 3745-77-07(C)(1))*

e) Reporting Requirements

- (1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

*(Authority for term: OAC rule 3745-15-03(A))*

- (2) The permittee shall submit quarterly deviation (excursion) reports that identify the following:
  - a. each period of time (start time and date, and end time and date) when the temperature of the outlet water from the condenser was outside of the acceptable range;
  - b. any period of time (start time and date, and end time and date) when the emissions unit(s) was/were in operation and the process emissions were not vented to the condenser;



- c. each incident of deviation described in “a” or “b” (above) where a prompt investigation was not conducted;
- d. each incident of deviation described in “a” or “b” where prompt corrective action, that would bring the emissions unit(s) into compliance and/or the temperature of the outlet water exiting from the condenser into compliance with the acceptable range, was determined to be necessary and was not taken; and
- e. each incident of deviation described in “a” or “b” where proper records were not maintained for the investigation and/or the corrective action(s).

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

*(Authority for term: OAC rule 3745-77-07(C)(1))*

- (3) The permittee shall notify the Administrator within 30 days when the maximum true vapor pressure of the liquid stored in T023 exceeds 15.0 kPa.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 60, Subpart Kb)*

f) Testing Requirements

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

- a. Emission Limitations:

OC emissions shall not exceed 0.20 ton per year. (T010)

OC emissions shall not exceed 1.79 tons per year. (T012)

OC emissions shall not exceed 1.13 tons per year. (T013)

OC emissions shall not exceed 2.38 tons per year. (T022)

OC emissions shall not exceed 2.80 tons per year. (T023)

Applicable Compliance Method:

Compliance with the annual mass emissions limitations shall be demonstrated through the results of calculations performed using the most recent version of USEPA’s “Tanks Program” or AP-42 emission factors for working and breathing loss calculations.

*(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))*

g) Miscellaneous Requirements

- (1) None.