



State of Ohio Environmental Protection Agency

Street Address:

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122 S. Front Street
Columbus, OH 43215

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Columbus, OH 43216-1049

08/27/99

CERTIFIED MAIL

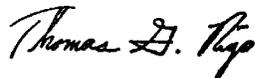
RE: Proposed Title V Chapter 3745-77 permit
16-52-05-0040
Owens Corning, Medina Plant

Attn: Genevieve Damico AR-18J
United States Environmental Protection Agency
Region V
77 West Jackson Blvd.
Chicago, IL 60604-3590

Dear Ms. Damico:

The proposed issuance of the Title V permit for Owens Corning, Medina Plant, has been created in Ohio EPA's State Air Resources System (STARS) on 08/27/99, for review by USEPA. This proposed action is identified in STARS as  3-Title V Proposed Permit T+C covering the facility specific terms and conditions, and  Title V Proposed Permit covering the general terms and conditions. This proposed permit will be processed for issuance as a final action after forty-five (45) days from USEPA's electronic notification of this proposed action. Please contact Mike Ahern, DAPC Permit Management Unit supervisor at (614) 644-3631 before the end of the forty-five (45) day review period if you wish to object to the proposed permit.

Very truly yours,



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

cc: Akron Air Pollution Control
Becky Castle

Ohio EPA

State of Ohio Environmental Protection Agency

TITLE V PERMIT

Date: 08/27/99

PROPOSED

Effective Date:

Expiration Date:

This document constitutes issuance to:

Owens Corning, Medina Plant
890 W. Smith Road
Medina, OH 44256

of a Title V permit for Facility ID: 16-52-05-0040

Emissions Unit ID (Company ID)/
Emissions Unit Activity Description:

F104 (Road Dust)

Fugitive Source - Road Dust

J001 (Loading Rack #1)

Loading of asphalt

J002 (Loading Rack #2)

Loading of asphalt

J003 (Loading Rack #3)

Loading of asphalt

P002 (Loading Rack - Cutback)

Loading cutback asphalt

P003 (Convertor #2)

Asphalt Blowing

P004 (Convertor #3)

Asphalt Blowing

P005 (Convertor #4)

Asphalt Blowing

P006 (Convertor #5 and #6)

Asphalt Blowing

P008 (3-tab Sealant Process)

MSA Melt Tank, Applicator Pan, Laminating Sealant Use Tank, four 3-tab Use Tanks

P101 (Coater/Coating Surge Tank #1)
Equipment to produce asphalt coated mat.

P901 (Parting Agent Handling System)
Transfer and storage of parting agent

P902 (Mineral Filler Handling System #1)
Transfer and storage of filler

P903 (4-wide Roofing Line)
Roofing products line includes Material Surfacing Applicator #2, Filler Mixer #2, Cooling Section #2, and Coater/Coating Surge Tank #2

P904 (Mineral Filler Handling System #2)
Transfer and storage for filler

T001 (#25 Storage Tank)
Asphalt storage

T004 (#24 Storage Tank)
Asphalt storage

T005 (#23 Storage Tank)
Asphalt storage

T006 (#61 Storage Tank)
Mineral Spirits storage

T007 (#50 Storage Tank)
Asphalt storage

T008 (#52 Storage Tank)
Asphalt storage

T009 (#53 Storage Tank)
Asphalt storage

T010 (#60 Storage Tank)
Mineral Spirits storage

T011 (#62 Storage Tank)
Cutback asphalt blend, cooling, and storage

T012 (#65 Storage Tank)
Cutback asphalt blend, cooling, and storage

T013 (#66 Storage Tank)
Cutback asphalt blend, cooling, and storage

T014 (#26 Storage Tank)
Asphalt storage

T015 (#27 Storage Tank)
Asphalt storage

T016 (#30 Storage Tank)
Asphalt storage

T017 (#31 Storage Tank)

Asphalt storage

T018 (#40 Storage Tank)

Asphalt storage

T019 (#41 Storage Tank)

Asphalt storage

T020 (#42 Storage Tank)

Asphalt storage

T021 (#32 Storage Tank)

Asphalt storage

T022 (#64 Storage Tank)

Cutback asphalt blend, cooling, and storage

T023 (#63 Storage Tank)

Cutback asphalt blend, cooling, and storage

T026 (#28 Storage Tank)

Asphalt storage

T027 (#29 Storage Tank)

Asphalt storage

T029 (#44 Storage Tank)

Asphalt storage

T030 (#36 Storage Tank)

Coating storage tank

T031 (#51 Storage Tank)

Asphalt storage

T032 (#59 Storage Tank)

Cutback asphalt blend, cooling, and storage

T033 (#67 Storage Tank)

Cutback asphalt blend, cooling, and storage

T101 (#1 Storage Tank)

Asphalt storage

T102 (#2 Storage Tank)

Asphalt storage

Z004 (Pouring Shed)

Fugitive Source - The pouring of finished asphalt into drums.

Z006 (Material Surfacing Applicator #1)

Applies of surfacing materials

Z007 (Cooling Section #1)

Cooling of asphalt coated product

You will be contacted approximately eighteen (18) months prior to the expiration date regarding the renewal of this permit. If you are not contacted, please contact the appropriate Ohio EPA District Office or local air agency listed below. 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. If a renewal permit is not issued prior to the expiration date, the permittee may continue to operate pursuant to OAC rule 3745-77-04(A) and in accordance with the terms of this permit beyond the expiration date, provided that a complete renewal application is submitted no earlier than eighteen (18) months and no later than one-hundred eighty (180) days prior to the expiration date.

Described below is the current Ohio EPA District Office or local air agency that is responsible for processing and administering your Title V permit:

Akron Air Pollution Control
146 South High Street, Room 904
Akron, OH 44308
(330) 375-2480

OHIO ENVIRONMENTAL PROTECTION AGENCY

Christopher Jones
Director

PART I - GENERAL TERMS AND CONDITIONS

A. State and Federally Enforceable Section

1. Monitoring and Related Recordkeeping and Reporting Requirements

- a. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
 - i. The date, place (as defined in the permit), and time of sampling or measurements.
 - ii. The date(s) analyses were performed.
 - iii. The company or entity that performed the analyses.
 - iv. The analytical techniques or methods used.
 - v. The results of such analyses.
 - vi. The operating conditions existing at the time of sampling or measurement.
- b. Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.
- c. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:
 - i. Reports of any required monitoring and/or recordkeeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
 - ii. Quarterly written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be promptly made to the appropriate Ohio EPA District Office or local air agency. These quarterly written reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(i) and (ii) pertaining to the submission of monitoring reports every six months and OAC rule 3745-77-07(A)(3)(c)(iii) pertaining to the prompt reporting of all deviations except malfunctions, which shall be reported in accordance with OAC rule 3745-15-06. The written reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.) See B.8 below if no deviations occurred during the quarter.
 - iii. Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements contained in this permit shall be submitted to the appropriate Ohio EPA District Office or local air agency every six months, i.e., by January 31 and July 31 of each year for the previous six calendar months. These semi-annual written reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(i) and (ii) pertaining to the reporting of any deviations related to the monitoring, recordkeeping, and reporting

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

- iv. Each written report shall be signed by a responsible official certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.

2. Scheduled Maintenance/Malfunction Reporting

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction, i.e., upset, of any emissions units or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. (The definition of an upset condition shall be the same as that used in OAC rule 3745-15-06(B)(1) for a malfunction.) The verbal and written reports submitted pursuant to OAC rule 3745-15-06 shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(iii) pertaining to the prompt reporting of deviations caused by malfunctions or upsets.

Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emission unit(s) that is (are) served by such control system(s).

3. Risk Management Plans

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

4. Title IV Provisions

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

5. Severability Clause

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

6. General Requirements

- a. The permittee must comply with all terms and conditions of this permit. Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and reissuance, or modification, or for denial of a permit renewal application.

- b. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.
- c. This permit may be modified, reopened, revoked, or revoked and reissued, for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.
- d. This permit does not convey any property rights of any sort, or any exclusive privilege.
- e. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

7. Fees

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78.

8. 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.

9. 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 general terms and conditions shall apply to all operating scenarios authorized in this permit.

10. 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 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.

11. 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.

12. 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:
 - i. At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.
 - ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with paragraph (E) of OAC rule 3745-77-03.
 - iii. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
 - iv. As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.
- c. The permittee shall submit progress reports to the appropriate Ohio EPA District Office or local air agency concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually, or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:

- i. Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
 - ii. An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.
 - d. Compliance certifications concerning the terms and conditions contained in this permit that are federally enforceable emission limitations, standards, or work practices, shall be submitted to the appropriate Ohio EPA District Office or local air agency in the following manner and with the following content:
 - i. Compliance certifications shall be submitted annually on a calendar year basis. The annual certification shall be submitted on or before April 30th of each year during the permit term.
 - ii. Compliance certifications shall include the following:
 - (a) An identification of each term or condition of this permit that is the basis of the certification.
 - (b) The permittee's current compliance status.
 - (c) Whether compliance was continuous or intermittent.
 - (d) The method(s) used for determining the compliance status of the source currently and over the required reporting period.
 - (e) Such other facts as the Director of the Ohio EPA may require in the permit to determine the compliance status of the source.
 - iii. Compliance certifications shall contain such additional requirements as may be specified pursuant to sections 114(a)(3) and 504(b) of the Act.

13. 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.

14. 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).

15. 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.

16. 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, except that no such notice shall be required for changes that qualify as insignificant emission 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; and
- 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.

(For further clarification, the permittee can refer to Engineering Guide #63 that is available in their STARSHIP software package.)

17. 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.

B. State Only Enforceable Section

1. 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.

2. Reporting Requirements Related to Monitoring and Recordkeeping Requirements

The permittee shall submit required reports in the following manner:

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

3. Records Retention Requirements

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

4. Inspections and Information Requests

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon the premises of this source at any reasonable time for purposes of making inspections, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State air pollution laws and regulations and the terms and conditions of this permit. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

5. Scheduled Maintenance/Malfunction Reporting

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

6. Permit Transfers

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

7. Air Pollution Nuisance

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

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

If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

Part II - Specific Facility Terms and Conditions

A. State and Federally Enforcable Section

None

B. State Only Enforceable Section

1. The following insignificant emissions units are located at this facility:

- B002 - boiler #2
- B004 - boiler #1
- B103 - filler heater
- F001 - surfacing material system #2
- F103 - surfacing material system #1
- Z003 - diesel fuel tank
- Z005 - filler mixer #1
- Z008 - storage pile
- Z009 - fuel oil tank
- Z001 - #18 tank - cutter stock
- Z012 - MLA system
- Z013 - ink jet printer
- Z014 - ferric chloride tank #17
- Z015 - solvent cold cleaner
- Z016 - propane storage
- Z017 - asphalt preheater
- Z018 - hot oil heater #3
- Z019 - #3 preheater

Each insignificant emissions unit at this facility must comply with all applicable State and federal regulations, as well as any emission limitations and/or control requirements contained within a permit to install for the emissions unit.

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Road Dust (F104)
Activity Description: Fugitive Source - Road Dust

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
paved roadways and parking areas	OAC rule 3745-17-07(B)(4)	no visible particulate emissions except for 6 minutes during any 60-minute period
	OAC rule 3745-17-08(B), (B)(8), (B)(9)	reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust
See A.2.b through A.2.g below.		

2. Additional Terms and Conditions

- 2.a The paved roadways and parking areas that are covered by this permit and subject to the requirements of OAC rules 3745-17-07 and 3745-17-08 are listed below:

paved roadways:

- #1
- #2
- #3
- #4
- #5
- #6
- #8
- #10

paved parking areas:

- #7
- #9
- #11

2. Additional Terms and Conditions (continued)

- 2.b** The permittee shall employ reasonably available control measures on all paved roadways and parking areas for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to treat the paved roadways and parking areas by sweeping at sufficient treatment frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- 2.c** The permittee shall employ reasonably available control measures on the unpaved shoulders of all paved roadways for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to treat the unpaved shoulders of all paved roadways with water at sufficient treatment frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- 2.d** The needed frequencies of implementation of the control measures shall be determined by the permittee's inspections pursuant to the monitoring section of this permit. Implementation of the control measures shall not be necessary for a paved roadway or parking area that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Implementation of any control measure may be suspended if unsafe or hazardous driving conditions would be created by its use.
- 2.e** The permittee shall promptly remove, in such a manner as to minimize or prevent resuspension, earth and/or other material from paved streets onto which such material has been deposited by trucking or earth moving equipment or erosion by water or other means.
- 2.f** Open-bodied vehicles transporting materials likely to become airborne shall have such materials covered at all times if the control measure is necessary for the materials being transported.
- 2.g** Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rule 3745-17-08.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

- 1. Except as otherwise provided in this section, the permittee shall perform inspections of the paved roadways and parking areas in accordance with the following frequencies:

paved roadways	minimum inspection frequency
#1	weekly
#2	weekly
#3	weekly
#4	weekly
#5	weekly
#6	weekly
#8	weekly
#10	weekly

paved parking areas	minimum inspection frequency
#7	weekly
#9	weekly
#11	weekly

III. Monitoring and/or Record Keeping Requirements (continued)

2. The purpose of the inspections is to determine the need for implementing the above-mentioned control measures. The inspections shall be performed during representative, normal traffic conditions. No inspection shall be necessary for a roadway or parking area that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Any required inspection that is not performed due to any of the above-identified events shall be performed as soon as such event(s) has (have) ended, except if the next required inspection is within one week.
3. The permittee may, upon receipt of written approval from the appropriate Ohio EPA District Office or local air agency, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements.
4. The permittee shall maintain records of the following information:
 - a. the date and reason any required inspection was not performed, including those inspections that were not performed due to snow and/or ice cover or precipitation;
 - b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measures;
 - c. the dates the control measures were implemented; and
 - d. on a calendar quarter basis, the total number of days the control measures were implemented and the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measures.

The information required in section A.III.4.d shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

IV. Reporting Requirements

1. The permittee shall submit deviation reports that identify any of the following occurrences:
 - a. each week during which an inspection was not performed by the required frequency, excluding an inspection which was not performed due to an exemption for snow and/or ice cover or precipitation; and
 - b. each instance when a control measure, that was to be implemented as a result of an inspection, was not implemented.
2. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.

V. Testing Requirements

1. If required, compliance with the emission limitation for the paved roadways and parking areas identified above shall be determined in accordance with Test Method 22 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources," as such Appendix existed on July 1, 1996, and the modifications listed in paragraphs (B)(4)(a) through (B)(4)(d) of OAC rule 3745-17-03.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Loading Rack #1 (J001)
Activity Description: Loading of asphalt

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
asphalt loading rack #1 with a thermal incinerator	OAC rule 3745-17-07(A)	See A.I.2.a below.
	OAC rule 3745-17-07(B)	See A.I.2.b below.
	OAC rule 3745-17-08	The permittee shall employ overhead filling of tank-trucks to minimize or eliminate fugitive emissions.
	OAC rule 3745-17-11	48.0 lbs/hr of particulates (based on 144,000 lbs/hr maximum process weight)
	OAC rule 3745-21-07(E)	exempt
		See A.II.1 below.

2. Additional Terms and Conditions

- 2.a** Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by rule.
- 2.b** Visible particulate fugitive emissions shall not exceed 20% opacity as a 3-minute average.

II. Operational Restrictions

1. The permittee shall only load asphalt which is not a photochemically reactive material, as defined in OAC rule 3745-21-01(C)(5).
2. The average combustion temperature within the thermal incinerator, for any 3-hour block of time when the emissions unit is in operation, shall not be less than 1450 degrees Fahrenheit.

III. Monitoring and/or Record Keeping Requirements

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

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

- a. all 3-hour blocks of time during which the average combustion temperature within the thermal incinerator, when the emissions unit was in operation, was less than 1450 degrees Fahrenheit; and
 - b. a log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.
2. The permittee shall maintain documentation showing whether or not each asphalt material is a photochemically reactive material.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which identify all 3-hour blocks of time during which the average combustion temperature within the thermal incinerator does not comply with the temperature limitation specified above.
2. The deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c of this permit.
3. The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing if a "photochemically reactive material" [as defined in OAC rule 3745-21-01(C)(5)] is employed in the emissions unit. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 45 days after such an occurrence.

V. Testing Requirements

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

1.a Emission Limitation:

20% opacity as a 6-minute average, for stack emissions

Applicable Compliance Method:

OAC rule 3745-17-03(B)(1)

1.b Emission Limitation:

20% opacity as a 3-minute average for fugitive emissions

Applicable Compliance Method:

OAC rule 3745-17-03(B)(3)

1.c Emission Limitation:

48.0 lbs/hr of particulates

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance by testing in accordance with Method 5, 40 CFR Part 60, Appendix A.

Facility Name: **Owens Corning, Medina Plant**
Facility ID: **16-52-05-0040**
Emissions Unit: **Loading Rack #1 (J001)**

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
asphalt loading rack #1	none	none

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Loading Rack #2 (J002)
Activity Description: Loading of asphalt

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
asphalt loading rack #2 with a thermal incinerator	OAC rule 3745-17-07(A)	See A.I.2.a below.
	OAC rule 3745-17-07(B)	See A.I.2.b below.
	OAC rule 3745-17-08	The permittee shall employ overhead filling of tank-trucks to minimize or eliminate fugitive emissions.
	OAC rule 3745-17-11	48.0 lbs/hr of particulates (based on 144,000 lbs/hr maximum process weight)
	OAC rule 3745-21-07(E)	exempt See A.II.1 below.

2. Additional Terms and Conditions

- 2.a Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by rule.
- 2.b Visible particulate fugitive emissions shall not exceed 20% opacity as a 3-minute average.

II. Operational Restrictions

1. The permittee shall only load asphalt which is not a photochemically reactive material, as defined in OAC rule 3745-21-01(C)(5).
2. The average combustion temperature within the thermal incinerator, for any 3-hour block of time when the emissions unit is in operation, shall not be less than 1450 degrees Fahrenheit.

III. Monitoring and/or Record Keeping Requirements

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

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

- a. all 3-hour blocks of time during which the average combustion temperature within the thermal incinerator, when the emissions unit was in operation, was less than 1450 degrees Fahrenheit; and
 - b. a log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.
2. The permittee shall maintain documentation showing whether or not each asphalt material is a photochemically reactive material.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which identify all 3-hour blocks of time during which the average combustion temperature within the thermal incinerator does not comply with the temperature limitation specified above.
2. The deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c of this permit.
3. The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing if a "photochemically reactive material" [as defined in OAC rule 3745-21-01(C)(5)] is employed in the emissions unit. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 45 days after such an occurrence.

V. Testing Requirements

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

1.a Emission Limitation:

20% opacity as a 6-minute average, for stack emissions

Applicable Compliance Method:

OAC rule 3745-17-03(B)(1)

1.b Emission Limitation:

20% opacity as a 3-minute average for fugitive emissions

Applicable Compliance Method:

OAC rule 3745-17-03(B)(3)

1.c Emission Limitation:

48.0 lbs/hr of particulates

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance by testing in accordance with Method 5, 40 CFR Part 60, Appendix A.

Facility Name: **Owens Corning, Medina Plant**
Facility ID: **16-52-05-0040**
Emissions Unit: **Loading Rack #2 (J002)**

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
asphalt loading rack #2	none	none

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Loading Rack #3 (J003)
Activity Description: Loading of asphalt

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
asphalt loading rack #3 with a thermal incinerator	OAC rule 3745-17-07(A)	See A.I.2.a below.
	OAC rule 3745-17-07(B)	See A.I.2.b below.
	OAC rule 3745-17-08	The permittee shall employ overhead filling of tank-trucks to minimize or eliminate fugitive emissions.
	OAC rule 3745-17-11	50.9 lbs/hr of particulates (based on 192,000 lbs/hr maximum process weight)
	OAC rule 3745-21-07(E)	exempt
		See A.II.1 below.

2. Additional Terms and Conditions

- 2.a** Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by rule.
- 2.b** Visible particulate fugitive emissions shall not exceed 20% opacity as a 3-minute average.

II. Operational Restrictions

1. The permittee shall only load asphalt which is not a photochemically reactive material, as defined in OAC rule 3745-21-01(C)(5).
2. The average combustion temperature within the thermal incinerator, for any 3-hour block of time when the emissions unit is in operation, shall not be less than 1450 degrees Fahrenheit.

III. Monitoring and/or Record Keeping Requirements

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

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

- a. all 3-hour blocks of time during which the average combustion temperature within the thermal incinerator, when the emissions unit was in operation, was less than 1450 degrees Fahrenheit; and
 - b. a log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.
2. The permittee shall maintain documentation showing whether or not each asphalt material is a photochemically reactive material.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which identify all 3-hour blocks of time during which the average combustion temperature within the thermal incinerator does not comply with the temperature limitation specified above.
2. The deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c of this permit.
3. The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing if a "photochemically reactive material" [as defined in OAC rule 3745-21-01(C)(5)] is employed in the emissions unit. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 45 days after such an occurrence.

V. Testing Requirements

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

1.a Emission Limitation:

20% opacity as a 6-minute average for stack emissions

Applicable Compliance Method:

OAC rule 3745-17-03(B)(1)

1.b Emission Limitation:

20% opacity as a 3-minute average for fugitive emissions

Applicable Compliance Method:

OAC rule 3745-17-03(B)(3)

1.c Emission Limitation:

50.9 lbs/hr of particulates

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance by testing in accordance with Method 5, 40 CFR Part 60, Appendix A.

Facility Name: **Owens Corning, Medina Plant**
Facility ID: **16-52-05-0040**
Emissions Unit: **Loading Rack #3 (J003)**

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
asphalt loading rack #3	none	none

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Loading Rack - Cutback (P002)
Activity Description: Loading cutback asphalt

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
loading rack - cutback	OAC rule 3745-17-07(B)	See A.I.2.a below.
	OAC rule 3745-17-08	The permittee shall employ overhead filling of tank-trucks to minimize or eliminate fugitive emissions.
	OAC rule 3745-21-07(E)	exempt See A.II.1 below.

2. Additional Terms and Conditions

- 2.a Visible particulate fugitive emissions shall not exceed 20% opacity as a 3-minute average.

II. Operational Restrictions

- The permittee shall only load cutback asphalt which is not a photochemically reactive material, as defined in OAC rule 3745-21-01(C)(5).

III. Monitoring and/or Record Keeping Requirements

- The permittee shall maintain documentation showing whether or not each asphalt material is a photochemically reactive material.

IV. Reporting Requirements

- The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing if a "photochemically reactive material" [as defined in OAC rule 3745-21-01(C)(5)] is employed in the emissions unit. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 45 days after such an occurrence.

V. Testing Requirements

- Compliance with the emission limitation in section A.I.1 of these terms and conditions shall be determined in accordance with the following method:

V. Testing Requirements (continued)

1.a Emission Limitation:

20% opacity as a 3-minute average for fugitive emissions

Applicable Compliance Method:

OAC rule 3745-17-03(B)(3)

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
loading rack - cutback	none	none

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Converter #2 (P003)
Activity Description: Asphalt Blowing

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
converter #2 with a thermal incinerator	OAC rule 3745-17-07	See A.I.2.a below.
	OAC rule 3745-17-11	40.7 lbs/hr of particulates (based on 32.5 tons per hour maximum process weight)
	40 CFR Part 60, Subpart UU	0.60 kilograms of particulates per megagram of asphalt charged to the still
		0.67 kilograms of particulates per megagram of asphalt charged to the still when a catalyst is added to the still
		0% opacity for the exhaust gases

2. Additional Terms and Conditions

- 2.a The visible particulate emissions limitation based on OAC rule 3745-17-07 is less stringent than the visible particulate emissions limitation established pursuant to 40 CFR Part 60, Subpart UU.

II. Operational Restrictions

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

III. Monitoring and/or Record Keeping Requirements

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

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

- a. all 3-hour blocks of time during which the average combustion temperature within the thermal incinerator, when the emissions unit was in operation, was less than 1450 degrees Fahrenheit or more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance; and
 - b. a log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.
2. The permittee shall 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 emission incident; and
 - e. any corrective actions taken to eliminate the visible emissions.

IV. Reporting Requirements

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

V. Testing Requirements

1. 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 6 months after issuance of the permit and within 6 months prior to permit renewal.
 - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate(s) for particulates.
 - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): "for particulates, Method 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.

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).

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

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

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

2.a Emission Limitation:

40.7 lbs/hr of particulates

0.60 kilograms of particulates per megagram of asphalt charged to the the still

0.67 kilograms of particulates per megagram of asphalt charged to the still when a catalyst is added to the still

Applicable Compliance Method:

Method 5 of 40 CFR 60, Appendix A

2.b Emission Limitation:

0% opacity for the exhaust gases

Applicable Compliance Method:

Method 9 of 40 CFR Part 60, Appendix A

Facility Name: **Owens Corning, Medina Plant**
Facility ID: **16-52-05-0040**
Emissions Unit: **Convertor #2 (P003)**

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
converter #2 with a thermal incinerator	none	none

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Convertor #3 (P004)
Activity Description: Asphalt Blowing

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
converter #3 with thermal incinerator	OAC rule 3745-17-07	See A.I.2.a below.
	OAC rule 3745-17-11	39.2 lbs/hr of particulates (based on 27.6 tons per hour maximum process weight)
	40 CFR Part 60, Subpart UU	0.60 kilograms of particulates per megagram of asphalt charged to the still during blowing
		0.67 kilograms of particulates per megagram of asphalt charged to the still when a catalyst is added to the still
		0% opacity for the exhaust gases

2. Additional Terms and Conditions

- 2.a The visible particulate emissions limitation based on OAC rule 3745-17-07 is less stringent than the visible particulate emissions limitation established pursuant to 40 CFR Part 60, Subpart UU.

II. Operational Restrictions

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

III. Monitoring and/or Record Keeping Requirements

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

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

- a. all 3-hour blocks of time during which the average combustion temperature within the thermal incinerator, when the emissions unit was in operation, was less than 1450 degrees Fahrenheit or more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance; and
 - b. a log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.
2. The permittee shall 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 emission incident; and
 - e. any corrective actions taken to eliminate the visible emissions.

IV. Reporting Requirements

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

V. Testing Requirements

1. 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 6 months after issuance of the permit and within 6 months prior to permit renewal.
 - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate(s) for particulates.
 - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): "for particulates, Method 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.

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).

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

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

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

2.a Emission Limitation:

39.2 lbs/hr of particulates

0.60 kilograms of particulates per megagram of asphalt charged to the the still during blowing

0.67 kilograms of particulates per megagram of asphalt charged to the still when a catalyst is added to the still

Applicable Compliance Method:

Method 5 of 40 CFR 60, Appendix A

2.b Emission Limitation:

0% opacity for the exhaust gases

Applicable Compliance Method:

Method 9 of 40 CFR Part 60, Appendix A

Facility Name: **Owens Corning, Medina Plant**

Facility ID: **16-52-05-0040**

Emissions Unit: **Convertor #3 (P004)**

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
converter #3 with thermal incinerator	none	none

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Converter #4 (P005)
Activity Description: Asphalt Blowing

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
converter #4 with thermal incinerator	OAC rule 3745-17-07	See A.I.2.a below.
	OAC rule 3745-17-11	40.7 lbs/hr of particulates (based on 32.5 tons per hour maximum process weight)
	40 CFR Part 60, Subpart UU	0.60 kilograms of particulates per megagram of asphalt charged to the still during blowing 0.67 kilograms of particulates per megagram of asphalt charged to the still when a catalyst is added to the still 0% opacity for the exhaust gases

2. Additional Terms and Conditions

- The visible particulate emissions limitation based on OAC rule 3745-17-07 is less stringent than the visible particulate emissions limitation established pursuant to 40 CFR Part 60, Subpart UU.

II. Operational Restrictions

- The average combustion temperature within the thermal incinerator, for any 3-hour block of time when the emissions unit is in operation, shall not be less than 1450 degrees Fahrenheit.

III. Monitoring and/or Record Keeping Requirements

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

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

- a. all 3-hour blocks of time during which the average combustion temperature within the thermal incinerator, when the emissions unit was in operation, was less than 1450 degrees Fahrenheit or more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance; and
 - b. a log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.
2. The permittee shall 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 emission incident; and
 - e. any corrective actions taken to eliminate the visible emissions.

IV. Reporting Requirements

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

V. Testing Requirements

1. 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 6 months after issuance of the permit and within 6 months prior to permit renewal.
 - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate(s) for particulates.
 - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): "for particulates, Method 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.

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).

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

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

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

2.a Emission Limitation:

40.7 lbs/hr of particulates

0.60 kilograms of particulates per megagram of asphalt charged to the the still during blowing

0.67 kilograms of particulates per megagram of asphalt charged to the still when a catalyst is added to the still

Applicable Compliance Method:

Method 5 of 40 CFR 60, Appendix A

2.b Emission Limitation:

0% opacity for the exhaust gases

Applicable Compliance Method:

Method 9 of 40 CFR Part 60, Appendix A

Facility Name: **Owens Corning, Medina Plant**

Facility ID: **16-52-05-0040**

Emissions Unit: **Convertor #4 (P005)**

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
converter #4 with thermal incinerator	OAC rule 3745-31-05 (PTI 16-420)	28.4 tpy of particulates

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

- Emission Limitation:

28.4 tpy of particulates

Applicable Compliance Method:

Multiply the results of the most recent stack test (in lbs/hr of particulates) by the maximum number of hours of operation, and convert the result to tons per year by dividing by 2,000 lbs/ton.

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Converter #5 and #6 (P006)
Activity Description: Asphalt Blowing

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
asphalt blowing stills with thermal incinerator - converters #5 and #6	OAC rule 3745-17-07	See A.I.2.a below.
	OAC rule 3745-17-11	40.7 lbs/hr of particulates (based on 32.5 tons per hour maximum process weight)
	40 CFR Part 60, Subpart UU	0.60 kilograms of particulates per megagram of asphalt charged to the still during blowing 0.67 kilograms of particulates per megagram of asphalt charged to the still when a catalyst is added to the still 0% opacity for the exhaust gases

2. Additional Terms and Conditions

- 2.a The visible particulate emissions limitation based on OAC rule 3745-17-07 is less stringent than the visible particulate emissions limitation established pursuant to 40 CFR Part 60, Subpart UU.

II. Operational Restrictions

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

III. Monitoring and/or Record Keeping Requirements

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

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

- a. all 3-hour blocks of time during which the average combustion temperature within the thermal incinerator, when the emissions unit was in operation, was less than 1450 degrees Fahrenheit or more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance; and
 - b. a log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.
2. The permittee shall 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 emission incident; and
 - e. any corrective actions taken to eliminate the visible emissions.

IV. Reporting Requirements

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

V. Testing Requirements

1. 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 6 months after issuance of the permit and within 6 months prior to permit renewal.
 - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate(s) for particulates.
 - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): "for particulates, Method 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.

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).

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

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

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

2.a Emission Limitation:

40.7 lbs/hr of particulates

0.60 kilograms of particulates per megagram of asphalt charged to the the still during blowing

0.67 kilograms of particulates per megagram of asphalt charged to the still when a catalyst is added to the still

Applicable Compliance Method:

Method 5 of 40 CFR 60, Appendix A

2.b Emission Limitation:

0% opacity for the exhaust gases

Applicable Compliance Method:

Method 9 of 40 CFR Part 60, Appendix A

Facility Name: **Owens Corning, Medina Plant**
Facility ID: **16-52-05-0040**
Emissions Unit: **Convertor #5 and #6 (P006)**

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
asphalt blowing stills with thermal incinerator - convertors #5 and #6	OAC rule 3745-31-05 (PTI 16-1622)	combined emissions from convertors #5 and #6 shall not exceed the following: 0.27 lb/hr of ethyl benzene 0.28 lb/hr of benzene 20.3 lbs/hr of sulfur dioxide (SO ₂) 4.56 lbs/hr of nitrogen oxides (NO _x) 25.5 lbs/hr of carbon monoxide (CO) 5.54 lbs/hr of PM ₁₀ 2.16 lbs/hr of volatile organic compounds (VOC) 6.13 lbs/hr of hydrogen chloride (HCl)

2. Additional Terms and Conditions

None

II. Operational Restrictions

1. The emissions units shall be equipped with a knockout chamber and fume incinerator to control emissions.
2. The fume incinerator shall only burn #2 fuel oil during times of natural gas curtailment only if catalyst-treated asphalt is produced in convertors #5 and #6 during that time.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information for each change where the air toxic modeling was required pursuant to the Air Toxic Policy:
 - a. background data that describes the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.); and
 - b. a copy of the resulting computer model runs that show the results of the application of the Air Toxic Policy for the change.

IV. Reporting Requirements

None

V. Testing Requirements

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

V. Testing Requirements (continued)

1.a Emission Limitation:

0.27 lb/hr of ethyl benzene
0.28 lb/hr of benzene

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance by testing in accordance with Method 18, 40 CFR Part 60, Appendix A.

1.b Emission Limitation:

20.3 lbs/hr of SO₂

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance by testing in accordance with Method 6, 40 CFR Part 60, Appendix A.

1.c Emission Limitation:

4.56 lbs/hr of NO_x

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance by testing in accordance with Method 7, 40 CFR Part 60, Appendix A.

1.d Emission Limitation:

25.5 lbs/hr of CO

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance by testing in accordance with Method 10, 40 CFR Part 60, Appendix A.

1.e Emission Limitation:

5.54 lbs/hr of PM₁₀

Applicable Compliance Method:

Method 5, 40 CFR Part 60, Appendix A

1.f Emission Limitation:

2.16 lbs/hr of VOC

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance by testing in accordance with Method 25, 40 CFR Part 60, Appendix A.

V. Testing Requirements (continued)

1.g Emission Limitation:

6.13 lbs/hr of HCl

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance by testing in accordance with Method 26, 40 CFR Part 60, Appendix A.

VI. Miscellaneous Requirements

1. This permit allows the use of materials (typically coatings and cleanup materials) specified by the permittee in the permit to install application for this emissions unit. To fulfill the best available technology requirements of (OAC) rule 3745-31-05 and to ensure compliance with OAC rule 3745-15-07 (Air Pollution Nuisances Prohibited), the emission limitation(s) specified in this permit was (were) established using the Ohio EPA's "Air Toxic Policy" and is (are) based on both the materials used and the design parameters of the emissions unit's exhaust system, as specified in the application. The Ohio EPA's "Air Toxic Policy" was applied for each pollutant using the SCREEN 3.0 model and comparing the predicted 1-hour maximum ground-level concentration to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for each pollutant:

Pollutant: sulfur dioxide

TLV (mg/m³): 5.2

Maximum Hourly Emission Rate (lbs/hr): 12.2

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m³): 24.7

MAGLC (ug/m³): 123.8

Pollutant: nitrogen dioxide

TLV (mg/m³): 5.6

Maximum Hourly Emission Rate (lbs/hr): 1.5

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m³): 3.04

MAGLC (ug/m³): 133.3

Pollutant: carbon monoxide

TLV (mg/m³): 29

Maximum Hourly Emission Rate (lbs/hr): 13.5

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m³): 23.3

MAGLC (ug/m³): 690.5

Pollutant: PM10

TLV (mg/m³): 10

Maximum Hourly Emission Rate (lbs/hr): 2.93

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m³): 5.93

MAGLC (ug/m³): 238.1

Pollutant: benzene

TLV (mg/m³): 32

Maximum Hourly Emission Rate (lbs/hr): 0.151

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m³): 0.31

MAGLC (ug/m³): 761.9

VI. Miscellaneous Requirements (continued)

Pollutant: ethylbenene

TLV (mg/m³): 434

Maximum Hourly Emission Rate (lbs/hr): 0.143

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m³): 0.29

MAGLC (ug/m³): 10,333

2. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by the OAC rule 3745-31-01. The permittee is hereby advised that the following changes to the process may be determined to be a "modification":
 - a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value specified in the above table;
 - b. changes to the emissions unit or its exhaust parameters (e.g., increased emission rate [not including an increase in an "allowable" emission limitation specified in the terms and conditions of this permit], reduced exhaust gas flow rate, and decreased stack height);
 - c. changes in the composition of the materials used, or use of new materials, that would result in the emission of an air contaminant not previously permitted; and
 - d. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant that has a listed TLV.
3. The Ohio EPA will not consider any of the above-mentioned as a "modification" requiring a permit to install, if the following conditions are met:
 - a. the change is not otherwise considered a "modification" under OAC Chapter 3745-31;
 - b. the permittee can continue to comply with the allowable emission limitations specified in its permit to install; and
 - c. prior to the change, the applicant conducts an evaluation pursuant to the Air Toxic Policy, determines that the changed emissions unit still satisfies the Air Toxic Policy, and the permittee maintains documentation that identifies the change and the results of the application of the Air Toxic Policy for the change.

For any change to the emissions unit or its method of operation that either would require an increase in the emission limitation(s) established by this permit or would otherwise be considered a "modification" as defined in OAC rule 3745-31-01, the permittee shall obtain a final permit to install prior to the change.

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: 3-tab Sealant Process (P008)

Activity Description: MSA Melt Tank, Applicator Pan, Laminating Sealant Use Tank, four 3-tab Use Tanks

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
3-tab sealant process with a baghouse - MSA melt tank, applicator pan, laminating sealant use tank, existing four 3-tab use tanks	OAC rule 3745-17-07 OAC rule 3745-17-11	See A.I.2.a below. 1.80 lbs/hr of particulates (based on 585 lbs/hr maximum process weight)

2. Additional Terms and Conditions

- 2.a Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by rule.

II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 0.25 to 5 inches of water while the emissions unit is in operation.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a weekly basis.
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. 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 emission incident; and
 - e. any corrective actions taken to eliminate the visible emissions.

IV. Reporting Requirements

1. The permittee shall submit pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.

IV. Reporting Requirements (continued)

2. These deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c of this permit.
3. 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 (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.

V. Testing Requirements

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

1.a Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

OAC rule 3745-17-03(B)(1)

1.b Emission Limitation:

1.80 lbs/hr of particulates

Applicable Compliance Method:

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

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
3-tab sealant process with a baghouse - MSA melt tank, applicator pan, laminating sealant use tank, existing four 3-tab use tanks	OAC rule 3745-31-05 (PTI 16-1755)	1% opacity as a 6-minute average 1.08 lbs/day of particulates 0.084 tpy of particulates 12.06 lbs/day of organic compounds (OC) 2.14 tpy of OC 18.79 lbs/day of carbon monoxide (CO) 3.36 tpy of CO

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain the following information, on a monthly basis:
 - a. the company identification of the material stored in each tank;
 - b. the total MSA use (calculated by multiplying the pounds of sealant applied to each square times the number of squares coated per month), in pounds;
 - c. the results of the monthly LEL reading for each tank;
 - d. the estimate of vent flow, in cfm;
 - e. the number of hours the emissions unit was in operation; and
 - f. the OC and CO mass emission rates for the entire process, in lbs/day, calculated in accordance with sections B.V.1.c and B.V.1.d.

III. Monitoring and/or Record Keeping Requirements (continued)

2. For the purposes of calculating OC emissions from MSA use, the following documentation shall be maintained on site for each and every tank:
 - a. the vapor molecular weight, in lb/lb-mole;
 - b. the vapor pressure at the daily average liquid surface temperature, in psia;
 - c. the tank maximum liquid volume, in ft³;
 - d. the tank diameter, in ft;
 - e. the maximum liquid height, in ft;
 - f. the vapor space volume, in ft³; and
 - g. the vapor density, in lb/ft³.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which include the following information:
 - a. an identification of each month during which the calculated average daily organic compound emissions exceeded 12.06 lbs/day, and the actual calculated average organic compound emissions for each such month; and
 - b. an identification of each month during which the calculated average daily carbon monoxide emissions exceeded 18.79 lbs/day, and the actual calculated average carbon monoxide emissions for each such month.
2. These deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition B.2 of this permit.

V. Testing Requirements

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

1% opacity as a 6-minute average

Applicable Compliance Method:

OAC rule 3745-17-03(B)(1)
 - 1.b Emission Limitation:

1.08 lbs/day of particulates
0.084 tpy of particulates

Applicable Compliance Method:

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

V. Testing Requirements (continued)

1.c Emission Limitation:

12.06 lbs/day of OC
2.14 tpy of OC

Applicable Compliance Method:

OC emissions (lbs/day) = MSA Melt Tank (lbs/day) + MSA Applicator Pan (lbs/day) + MSA Use (lbs/day)

MSA Melt Tank and MSA Applicator Pan OC emissions are calculated using the following methodology:

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

OC emissions (lbs/day) = OC Concentration (lbs/cf) * Flow * (60 min/hr) * (24 hrs/day)

Where:

%LEL = Lower Explosion Limit value, measured monthly by an instrument at each tank;
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 Prevention and Protection, Frank T. Bodurtha, p12, MCGraw Hill, 1980; and
Flow = Estimate of vent flow, (cfm).

The OC emissions from MSA Use for each tank (MSA Laminator tank & (4) MSA 3-tab tanks) shall be determined in accordance with AP-42, Fifth Edition (9/97), Section 7.1.3, Equations 1-2 (Standing Storage Loss) and 1-23 (Working Loss), however these equations are modified to demonstrate compliance with a daily limitation.

MSA Use emissions (lbs/day) = Standing Storage Loss + Working Loss

L_s (lbs/day) = $(V_v) * (W_v) * (K_e) * (K_s)$

where:

L_s = standing storage loss, lb/day;
 V_v = vapor space volume, ft³;
 W_v = vapor density, lb/ft³;
 K_e = vapor space expansion factor, dimensionless; and
 K_s = vented vapor saturation factor, dimensionless.

L_w (lbs/day) = $(1/\#days) * (0.0010) * (M_v) * (P_{va}) * (Q) * (K_n) * (K_p)$

where:

L_w = Working Loss, lbs/day;
#days = number of days in the month;
 M_v = vapor molecular weight, lb/lb-mole;
 P_{va} = vapor pressure at daily average liquid surface temperature, psia;
 Q = monthly net throughput (tank capacity [bbl] times monthly turnover rate), bbl/month; and
 K_n = turnover factor, dimensionless.

V. Testing Requirements (continued)

for turnovers > 36, $K_n = (180 + N) / (6N)$
 for turnovers < or = 36, $K_n = 1$

N = number of turnovers per month, dimensionless

$$N = (5.614Q) / (V_{lx})$$

where:

Q = monthly net throughput, bbl/month; and
 V_{lx} = tank maximum liquid volume, ft³.

and

$$V_{lx} = (\pi) * (D^2) * (H_{lx})$$

where:

D = diameter, ft; and
 H_{lx} = maximum liquid height, ft.

K_p = working loss product factor, dimensionless, 0.75 for crude oils. For all other organic liquids, K_p = 1.

1.d Emission Limitation:

18.79 lbs/day of CO
 3.36 tpy of CO

Applicable Compliance Method:

CO emissions = MSA Melt Tank + MSA Applicator Pan + MSA Use

MSA Melt Tank, MSA Applicator Pan, and MSA Use CO emissions are calculated using the following methodology:

$$CO \text{ (lbs/day)} = EF * X \text{ ppm} * 0.028 \text{ m}^3/\text{cf} * Y \text{ CFM} * \text{minutes of operation} * (\text{gm}/1000\text{mg}) * (\text{lb}/454\text{gm}) * (\text{hr}/60 \text{ min}) * (\text{day}/24\text{hr})$$

Where:

EF = 1.14 mg/m³/ppm emission factor from AP-42 for CO;
 X ppm = correlation of the concentration of CO based on the LEL of asphalt = 142 * %LEL + 800 for oxidized asphalt; and
 Y CFM = estimate of vent flow, cfm.

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Coater/Coating Surge Tank #1 (P101)

Activity Description: Equipment to produce asphalt coated mat.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
coater/coating surge tank #1	OAC rule 3745-17-07	See A.I.2.a below.
	OAC rule 3745-17-11	42 lbs/hr of particulates (based on 37.7 tons per hour maximum process weight rate)
	40 CFR Part 60, Subpart UU	For saturator: 0.04 kilogram of particulates per megagram of asphalt shingle no visible emissions from the saturator capture system for more than 20 percent of any period of consecutive valid observations totalling 60 minutes 20% opacity for the exhaust gases

2. Additional Terms and Conditions

- 2.a The visible particulate emissions limitation based on OAC rule 3745-17-07 is less stringent than the visible particulate emissions limitation established pursuant to 40 CFR Part 60, Subpart UU.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping 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 and saturator capture system 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 emission incident; and
 - e. any corrective actions taken to eliminate the visible emissions.

IV. Reporting Requirements

1. The permittee shall submit semiannual written reports which (a) identify all days during which any visible particulate emissions were observed from the stack and saturator capture system serving this emissions unit 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.

V. Testing Requirements

1. 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 6 months after permit issuance.
 - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate(s) for particulate matter.
 - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): for particulates, Method 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.

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).

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

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

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

V. Testing Requirements (continued)

2.a Emission Limitation:

42 lbs/hr of particulates
0.04 kilogram of particulates per megagram of asphalt shingle

Applicable Compliance Method:

Method 5 of 40 CFR 60, Appendix A

The emission rate of particulates from the saturator shall be calculated using the following equation:

$$E = (cs * Qsd) / (P * K)$$

where,

E = emission rate of particulates, kg/Mg
cs = concentration of particulates, g/dscm (g/dscf)
Qsd = volumetric flow rate of effluent gas, dscm/hr (dscf/hr)
P = asphalt roofing production rate or asphalt charging rate, Mg/hr (ton/hr)
K = conversion factor, 1000 g/kg [907.2/(g-Mg)/(kg-ton)]

2.b Emission Limitation:

no visible emissions from the saturator capture system for more than 20 percent of any period of consecutive valid observations totalling 60 minutes

Applicable Compliance Method:

Method 22 of 40 CFR 60, Appendix A

2.c Emission Limitation:

20% opacity for exhaust gases

Applicable Compliance Method:

Method 9 of 40 CFR 60, Appendix A

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
coater/coating surge tank #1	none	none

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Parting Agent Handling System (P901)
Activity Description: Transfer and storage of parting agent

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
parting agent handling system - parting agent conveying, storage silo and use equipment with three baghouses	OAC rule 3745-17-07	See A.I.2.c below.
	OAC rule 3745-17-08	See A.I.2.b below.
	OAC rule 3745-17-11	13.6 lbs/hr of particulates (based on 6 tons per hour maximum process weight)
	40 CFR Part 60, Subpart UU	1% opacity for visible emissions (fugitive and stack emissions)

2. Additional Terms and Conditions

- 2.a The specific operation(s), property, and/or equipment which constitute this emissions unit are listed below:
 - a. parting agent use bin #1 and #2;
 - b. belt conveying and transfer of parting agent to use bin #1 and #2; and
 - c. parting agent silo.
- 2.b The use bin shall be enclosed and vented to a fabric filter to control particulate emissions.
- 2.c The visible particulate emissions limitation based on OAC rule 3745-17-07 is less stringent than the visible particulate emissions limitation established pursuant to 40 CFR Part 60, Subpart UU.

II. Operational Restrictions

1. The pressure drop across each baghouse shall be maintained within the range of 0.5 to 5.0 inches of water while the emissions unit is in operation.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across each baghouse while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across each baghouse on a daily basis.

III. Monitoring and/or Record Keeping Requirements (continued)

2. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive emissions and 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 emission incident; and
 - e. any corrective actions taken to eliminate the visible emissions.

IV. Reporting Requirements

1. The permittee shall submit pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across any baghouse did not comply with the allowable range specified above.
2. The deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c of this permit.
3. The permittee shall submit semiannual written reports which (a) identify all days during which any visible fugitive and/or stack particulate emissions were observed from this emissions unit 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.

V. Testing Requirements

1. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:
 - 1.a Emission Limitation:

13.6 lbs/hr of particulates

Applicable Compliance Method:

If required, compliance with this mass emission limitation shall be based on stack testing per OAC rule 3745-17-03(B)(10).
 - 1.b Emission Limitation:

1% opacity for visible emissions
(fugitive and stack emissions)

Applicable Compliance Method:

Method 9 of 40 CFR Part 60, Appendix A

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
parting agent handling system - parting agent conveying, storage silo and use equipment with three baghouses	OAC rule 3745-31-05 (PTI 16-1622)	0.09 lb/hr of volatile organic compounds (VOC) (stack emissions) 0.26 lb/hr of PM10 (stack emissions)

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

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

1.a Emission Limitation:

0.09 lb/hr of VOC

Applicable Compliance Method:

If required, compliance with this mass emission limitation shall be based on stack testing per OAC rule 3745-21-10(C).

1.b Emission Limitation:

0.26 lb/hr of PM10

Applicable Compliance Method:

If required, compliance with this mass emission limitation shall be based on stack testing per Method 201, 40 CFR 51, Appendix M.

Facility Name: **Owens Corning, Medina Plant**
Facility ID: **16-52-05-0040**
Emissions Unit: **Parting Agent Handling System (P901)**

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Mineral Filler Handling System #1 (P902)
Activity Description: Transfer and storage of filler

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
mineral filler handling system - mineral filler conveying, storage and use equipment with four baghouses	OAC rule 3745-17-07	See A.I.2.a below.
	OAC rule 3745-17-08	The use bin shall be adequately enclosed and vented to a baghouse.
	OAC rule 3745-17-11	34.5 lbs/hr of particulates (based on 24 tons per hour maximum process weight)
	40 CFR Part 60, Subpart UU	1% opacity for visible emissions (fugitive and stack emissions)

2. Additional Terms and Conditions

- 2.a The visible particulate emissions limitation based on OAC rule 3745-17-07 is less stringent than the visible particulate emissions limitation established pursuant to 40 CFR Part 60, Subpart UU.

II. Operational Restrictions

- The pressure drop across each baghouse shall be maintained within the range of 0.5 to 5.0 inches of water while the emissions unit is in operation.

III. Monitoring and/or Record Keeping Requirements

- The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across each baghouse while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across each baghouse on a daily basis.

III. Monitoring and/or Record Keeping Requirements (continued)

2. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive emissions and 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 emission incident; and
 - e. any corrective actions taken to eliminate the visible emissions.

IV. Reporting Requirements

1. The permittee shall submit pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across any baghouse did not comply with the allowable range specified above.
2. The deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c of this permit.
3. The permittee shall submit semiannual written reports which (a) identify all days during which any visible fugitive and/or stack particulate emissions were observed from this emissions unit 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.

V. Testing Requirements

1. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:
 - 1.a Emission Limitation:

34.5 lbs/hr of particulates

Applicable Compliance Method:

If required, compliance with this mass emission limitation shall be based on stack testing per OAC rule 3745-17-03(B)(10).
 - 1.b Emission Limitation:

1% opacity for visible emissions
(fugitive and stack emissions)

Applicable Compliance Method:

Method 9 of 40 CFR Part 60, Appendix A

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
mineral filler handling system - mineral filler conveying, storage and use equipment	none	none

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: 4-wide Roofing Line (P903)

Activity Description: Roofing products line includes Material Surfacing Applicator #2, Filler Mixer #2, Cooling Section #2, and Coater/Coating Surge Tank #2

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
roofing products line / 4-wide with two baghouses	OAC rule 3745-17-07	See A.I.2.a below.
	OAC rule 3745-17-08	See sections A.I.2.c and A.I.2.d below.
	OAC rule 3745-17-11	49.5 lbs/hr of particulates (based on 84 tons per hour maximum process weight rate)
	40 CFR Part 60, Subpart UU	For saturator: 0.04 kilogram of particulates per megagram of asphalt shingle no visible emissions from the saturator capture system for more than 20 percent of any period of consecutive valid observations totalling 60 minutes 20% opacity for exhaust gases

2. Additional Terms and Conditions

- 2.a The visible particulate emissions limitation based on OAC rule 3745-17-07 is less stringent than the visible particulate emissions limitation established pursuant to 40 CFR Part 60, Subpart UU.

2. Additional Terms and Conditions (continued)

- 2.b** The specific operation(s), property, and/or equipment which constitute this emissions unit are listed below:
- i. filler mixer #2 and the transfer of material to filler mixer #2;
 - ii. filled coating surge tank #2 and asphalt coater #2, including the transfer of asphalt coating to the surge tank, asphalt coater, and fiberglass web;
 - iii. surfacing material applicator, including the transfer of surfacing material and parting agent to coated web and surfacing material applicator;
 - iv. cooling section #2; and
 - v. cutting and packaging.
- 2.c** The filled coating surge tank and asphalt coater #2 shall be equipped with a capture system to adequately capture and vent particulate matter and asphalt fumes, generated from the transfer of asphalt coating to the surge tank, asphalt coater, and fiberglass web, to a fiber bed filter.
- 2.d** The surfacing material applicator shall be equipped with a capture system to adequately capture and vent particulates, generated from the transfer of surfacing material and parting agent to the applicator and coated web, to a fabric filter(s). The effluent from the fabric filter(s) shall be recirculated within the factor building.

II. Operational Restrictions

1. The pressure drop across each baghouse shall be maintained within the range of 0.5 to 5 inches of water while the emissions unit is in operation.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across each baghouse while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across each baghouse on a daily basis.
2. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive emissions and 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 emission incident; and
 - e. any corrective actions taken to eliminate the visible emissions.

IV. Reporting Requirements

1. The permittee shall submit pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across any baghouse did not comply with the allowable range specified above.
2. The deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c of this permit.
3. The permittee shall submit semiannual written reports which (a) identify all days during which any visible fugitive and/or stack particulate emissions were observed from this emissions unit 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.

V. Testing Requirements

1. 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 approximately 2.5 years after permit issuance and within 6 months prior to permit renewal.
 - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate(s) for particulates.
 - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): for particulates, Method 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.

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).

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

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

2. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:
 - 2.a Emission Limitation:

0.030 grain of particulates per dry standard cubic foot
49.5 lbs/hr of particulates
0.04 kilogram of particulates per megagram of asphalt shingle

Applicable Compliance Method:

Method 5 of 40 CFR 60, Appendix A

The emission rate of particulates from the saturator shall be calculated using the following equation:

$$E = (cs * Qsd) / (P * K)$$

where,

E = emission rate of particulates, kg/Mg
cs = concentration of particulates, g/dscm (g/dscf)
Qsd = volumetric flow rate of effluent gas, dscm/hr (dscf/hr)
P = asphalt roofing production rate or asphalt charging rate, Mg/hr (ton/hr)
K = conversion factor, 1000 g/kg [907.2/(g-Mg)/(kg-ton)]

V. Testing Requirements (continued)

2.b Emission Limitation:

no visible emissions from the saturator capture system for more than 20 percent of any period of consecutive valid observations totalling 60 minutes

Applicable Compliance Method:

Method 22 of 40 CFR 60, Appendix A

2.c Emission Limitation:

20% opacity for exhaust gases

Applicable Compliance Method:

Method 9 of 40 CFR 60, Appendix A

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
roofing products line / 4-wide	OAC rule 3745-31-05 (PTI 16-1622)	From the saturator/coater: 0.6 lb/hr of PM10 From combined equipment: 0.38 lb/hr of carbon monoxide (CO) 12.9 lbs/hr of volatile organic compounds (VOC) 0.21 lb/hr of sulfur dioxide (SO2) 23.3 lbs/hr of particulates 10.4 lbs/hr of PM10 1% opacity for control equipment exhaust gases 5% opacity from building ventilation

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information for each change where the air toxic modeling was required pursuant to the Air Toxic Policy:
 - a. background data that describes the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.); and
 - b. a copy of the resulting computer model runs that show the results of the application of the Air Toxic Policy for the change.

IV. Reporting Requirements

None

V. Testing Requirements

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

V. Testing Requirements (continued)

1.a Emission Limitation:

0.6 lb/hr of PM10 (saturator emissions)
23.3 lbs/hr of particulates (combined emissions)
10.4 lbs/hr of PM10 (combined emissions)

Applicable Compliance Method:

Method 5 of 40 CFR Part 60, Appendix A (for filterable particulates)
Method 201 of 40 CFR Part 51, Appendix M (for PM10)

1.b Emission Limitation:

0.38 lb/hr of CO

Applicable Compliance Method:

If required, compliance shall be demonstrated by testing in accordance with Method 10, 40 CFR Part 60, Appendix A.

1.c Emission Limitation:

12.9 lbs/hr of VOC

Applicable Compliance Method:

If required, compliance shall be demonstrated by testing in accordance with Method 25, 40 CFR Part 60, Appendix A.

1.d Emission Limitation:

0.21 lb/hr of SO₂

Applicable Compliance Method:

If required, compliance shall be demonstrated by testing in accordance with Method 6, 40 CFR Part 60, Appendix A.

1.e Emission Limitation:

1% opacity for control equipment exhaust gases
5% opacity from building ventilation

Applicable Compliance Method:

OAC rule 3745-17-03(B)(1)

VI. Miscellaneous Requirements

1. This permit allows the use of materials (typically coatings and cleanup materials) specified by the permittee in the permit to install application for this emissions unit. To fulfill the best available technology requirements of (OAC) rule 3745-31-05 and to ensure compliance with OAC rule 3745-15-07 (Air Pollution Nuisances Prohibited), the emission limitation(s) specified in this permit was (were) established using the Ohio EPA's "Air Toxic Policy" and is (are) based on both the materials used and the design parameters of the emissions unit's exhaust system, as specified in the application. The Ohio EPA's "Air Toxic Policy" was applied for each pollutant using the SCREEN 3.0 model and comparing the predicted 1-hour maximum ground-level concentration to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for each pollutant:

Pollutant: sulfur dioxide

TLV (mg/m³): 5.2

Maximum Hourly Emission Rate (lbs/hr): 0.25

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m³): 5.32

MAGLC (ug/m³): 123.8

Pollutant: carbon monoxide

TLV (mg/m³): 29

Maximum Hourly Emission Rate (lbs/hr): 0.151

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m³): 3.16

MAGLC (ug/m³): 690.5

Pollutant: PM10

TLV (mg/m³): 10

Maximum Hourly Emission Rate (lbs/hr): 0.6

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m³): 12.6

MAGLC (ug/m³): 238.1

2. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by the OAC rule 3745-31-01. The permittee is hereby advised that the following changes to the process may be determined to be a "modification":
 - a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value specified in the above table;
 - b. changes to the emissions unit or its exhaust parameters (e.g., increased emission rate [not including an increase in an "allowable" emission limitation specified in the terms and conditions of this permit], reduced exhaust gas flow rate, and decreased stack height);
 - c. changes in the composition of the materials used, or use of new materials, that would result in the emission of an air contaminant not previously permitted; and
 - d. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant that has a listed TLV.

VI. Miscellaneous Requirements (continued)

3. The Ohio EPA will not consider any of the above-mentioned as a "modification" requiring a permit to install, if the following conditions are met:
 - a. the change is not otherwise considered a "modification" under OAC Chapter 3745-31;
 - b. the permittee can continue to comply with the allowable emission limitations specified in its permit to install; and
 - c. prior to the change, the applicant conducts an evaluation pursuant to the Air Toxic Policy, determines that the changed emissions unit still satisfies the Air Toxic Policy, and the permittee maintains documentation that identifies the change and the results of the application of the Air Toxic Policy for the change.

For any change to the emissions unit or its method of operation that either would require an increase in the emission limitation(s) established by this permit or would otherwise be considered a "modification" as defined in OAC rule 3745-31-01, the permittee shall obtain a final permit to install prior to the change.

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Mineral Filler Handling System #2 (P904)

Activity Description: Transfer and storage for filler

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
mineral filler handling system - mineral filler conveying, storage and use equipment with four baghouses	OAC rule 3745-17-07	See A.I.2.f below.
	OAC rule 3745-17-08	See A.I.2.b - A.I.2.e below.
	OAC rule 3745-17-11	41.1 lbs/hr of particulates (based on 34 tons per hour maximum process weight)
	40 CFR Part 60, Subpart UU	1% opacity for visible emissions (fugitive and stack emissions)

2. Additional Terms and Conditions

- 2.a The specific operation(s), property, and/or equipment which constitute this emissions unit are listed below:
 - a. filler silo #3 and truck unloading by pneumatic removal to filler silo #3;
 - b. upper surge bin #2 and pneumatic conveying to filler upper surge bin #2;
 - c. transfer to filler heater #2;
 - d. lower surge bin #2 and screw conveying to filler lower surge bin #2; and
 - e. filler silo #4 and truck unloading by pneumatic removal to filler silo #4.
- 2.b The pneumatic unloading and conveying, storage silo, and upper surge bin shall be of an enclosed design and shall vent to fabric filters to control particulate emissions.
- 2.c The transfer of filler material to filler heater #2 shall be accomplished via an enclosed rotary valve.
- 2.d The screw conveyor and lower surge bin shall be enclosed to prevent emissions of particulates.
- 2.e The exhaust stacks from the fabric filter bin vents on silos #3 and #4 will be exhausted vertically. The exhaust from the upper filler surge bin #2 will 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 will exhaust within the factory building.

2. Additional Terms and Conditions (continued)

- 2.f The visible particulate emissions limitation based on OAC rule 3745-17-07 is less stringent than the visible particulate emissions limitation established pursuant to 40 CFR Part 60, Subpart UU.

II. Operational Restrictions

1. The pressure drop across each baghouse shall be maintained within the range of 0.5 to 5.0 inches of water while the emissions unit is in operation.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across each baghouse while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across each baghouse on a daily basis.
2. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive emissions and 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:
- the color of the emissions;
 - whether the emissions are representative of normal operations;
 - if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - the total duration of any visible emission incident; and
 - any corrective actions taken to eliminate the visible emissions.

IV. Reporting Requirements

1. The permittee shall submit pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across any baghouse did not comply with the allowable range specified above.
2. The deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c of this permit.
3. The permittee shall submit semiannual written reports which (a) identify all days during which any visible fugitive and/or stack particulate emissions were observed from this emissions unit 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.

V. Testing Requirements

1. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:
- 1.a Emission Limitation:
- no visible particulate emissions from the exhaust stack
- Applicable Compliance Method:
- OAC rule 3745-17-03(B)(7)

V. Testing Requirements (continued)

1.b Emission Limitation:

41.1 lbs/hr of particulates

Applicable Compliance Method:

If required, compliance with this mass emission limitation shall be based on stack testing per OAC rule 3745-17-03(B)(10).

1.c Emission Limitation:

1% opacity for visible emissions

Applicable Compliance Method:

Method 9 of 40 CFR Part 60, Appendix A

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
mineral filler handling system - mineral filler conveying, storage and use equipment	OAC rule 3745-31-05 (PTI 16-1622)	0.09 lb/hr of volatile organic compounds (VOC) (stack emissions) 3.16 lbs/hr of PM10 (stack emissions)

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

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

1.a Emission Limitation:

0.09 lb/hr of VOC

Applicable Compliance Method:

If required, compliance with this mass emission limitation shall be based on stack testing per OAC rule 3745-21-10(C).

1.b Emission Limitation:

3.16 lbs/hr of PM10

Applicable Compliance Method:

If required, compliance with this mass emission limitation shall be based on stack testing per Method 201 of 40 CFR Part 51, Appendix M.

Facility Name: **Owens Corning, Medina Plant**
Facility ID: **16-52-05-0040**
Emissions Unit: **Mineral Filler Handling System #2 (P904)**

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: #25 Storage Tank (T001)
Activity Description: Asphalt storage

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
#25 storage tank - fixed roof asphalt storage tank, 245,000-gallons	OAC rule 3745-21-09(L)	exempt (see A.II.1)

2. Additional Terms and Conditions

None

II. Operational Restrictions

1. 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.

III. Monitoring and/or Record Keeping Requirements

1. 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.

IV. Reporting Requirements

1. If the permittee places, stores, or holds in the fixed roof tank any petroleum liquid with a true vapor pressure which 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.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
#25 storage tank - fixed roof asphalt storage tank, 245,000-gallons	none	none

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: #24 Storage Tank (T004)
Activity Description: Asphalt storage

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
#24 storage tank - fixed roof asphalt storage tank, 245,000-gallons	OAC rule 3745-21-09(L)	exempt (see A.II.1)

2. Additional Terms and Conditions

None

II. Operational Restrictions

1. 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.

III. Monitoring and/or Record Keeping Requirements

1. 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.

IV. Reporting Requirements

1. If the permittee places, stores, or holds in the fixed roof tank any petroleum liquid with a true vapor pressure which 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.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
#24 storage tank - fixed roof asphalt storage tank, 245,000-gallons	none	none

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: #23 Storage Tank (T005)
Activity Description: Asphalt storage

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
#23 storage tank - fixed roof asphalt storage tank, 345,000-gallons	OAC rule 3745-21-09(L)	exempt (see A.II.1)

2. Additional Terms and Conditions

None

II. Operational Restrictions

1. 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.

III. Monitoring and/or Record Keeping Requirements

1. 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.

IV. Reporting Requirements

1. If the permittee places, stores, or holds in the fixed roof tank any petroleum liquid with a true vapor pressure which 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.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
#23 storage tank - fixed roof asphalt storage tank, 345,000-gallons	none	none

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: #61 Storage Tank (T006)
Activity Description: Mineral Spirits storage

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
#61 solvent storage tank - 100,000-gallon fixed roof solvent storage tank	OAC rule 3745-21-09(L)(1)	exempt (see A.II.1)

2. Additional Terms and Conditions

None

II. Operational Restrictions

1. 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.

III. Monitoring and/or Record Keeping Requirements

1. 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.

IV. Reporting Requirements

1. If the permittee places, stores, or holds in the fixed roof tank any petroleum liquid with a true vapor pressure which 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.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
#61 solvent storage tank - 100,000-gallon fixed roof solvent storage tank	OAC rule 3745-31-05 (PTI 16-1620)	0.34 tpy of organic compounds (OC)

2. Additional Terms and Conditions

- 2.a The fixed roof storage tank shall be equipped with a submerged filling pipe and shall vent to a water cooled vapor condenser.

II. Operational Restrictions

1. 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.
2. The water temperature exiting the condenser shall be continuously maintained at a value of not greater than 87 degrees Fahrenheit at all times while the emissions unit is in operation.
3. The permittee is not required to operate the condenser during mineral spirit unloading when the ambient temperature is less than 45 degrees F.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly install, operate and maintain equipment to continuously monitor and record the water temperature exiting the condenser while the emissions unit is in operation. The temperature monitor and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

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

- a. the outlet water temperature, on a once/shift basis; and
- b. a log or record of operating time for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit.

IV. Reporting Requirements

1. The permittee shall submit outlet water temperature deviation (excursion) reports that identify all periods of time during which the water temperature exiting the condenser did not comply with the temperature requirements specified above.
2. The deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition B.2 of this permit.

V. Testing Requirements

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

Facility Name: **Owens Corning, Medina Plant**

Facility ID: **16-52-05-0040**

Emissions Unit: **#61 Storage Tank (T006)**

V. Testing Requirements (continued)

1.a Emission Limitation:

0.34 tpy of OC

Applicable Compliance Method:

OC emissions from the storage tank shall be determined using USEPA's "Tanks Program 3.1." or AP-42 emission factors for working and breathing loss calculations.

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: #50 Storage Tank (T007)
Activity Description: Asphalt storage

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
storage tank #50 - 60,000-gallon heated asphalt storage tank controlled with a thermal incinerator	OAC rule 3745-17-07	See A.I.2.a below.
	OAC rule 3745-21-09(L)	exempt (see A.II.2)
	40 CFR 60 Subpart UU	visible emissions to the ambient air 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 clearing

2. Additional Terms and Conditions

- The visible particulate emissions limitation based on OAC rule 3745-17-07 is less stringent than the visible particulate emissions limitation established pursuant to 40 CFR Part 60, Subpart UU.

II. Operational Restrictions

- The average combustion temperature within the thermal incinerator, for any 3-hour block of time when the emissions unit is in operation, shall not be less than 1450 degrees Fahrenheit.
- 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.

III. Monitoring and/or Record Keeping Requirements

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

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

- a. all 3-hour blocks of time during which the average combustion temperature within the thermal incinerator, when the emissions unit was in operation, was less than 1450 degrees Fahrenheit; and
 - b. a log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.
2. The permittee shall maintain 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.
 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 emission incident; and
 - e. any corrective actions taken to eliminate the visible emissions.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which identify all 3-hour blocks of time during which the average combustion temperature within the thermal incinerator does not comply with the temperature limitation specified above.
2. These deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c of this permit.
3. If the permittee places, stores, or holds in the fixed roof tank any petroleum liquid with a true vapor pressure which 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.
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 (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.

V. Testing Requirements

1. Compliance with the emission limitation in section A.I.1 of these terms and conditions shall be determined in accordance with the following method:

Facility Name: **Owens Corning, Medina Plant**

Facility ID: **16-52-05-0040**

Emissions Unit: **#50 Storage Tank (T007)**

V. Testing Requirements (continued)

1.a Emission Limitation:

visible emissions to the ambient air 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 clearing

Applicable Compliance Method:

Method 9 of 40 CFR Part 60, Appendix A

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
storage tank #50 - 60,000-gallon heated asphalt storage tank controlled with a thermal incinerator	none	none

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: #52 Storage Tank (T008)
Activity Description: Asphalt storage

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
storage tank #52 - 30,000-gallon heated asphalt storage tank controlled with a thermal incinerator	OAC rule 3745-17-07	See A.I.2.a below.
	OAC rule 3745-21-09(L)	exempt (see A.I.2.b)
	40 CFR 60 Subpart UU	visible emissions to the ambient air 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 clearing

2. Additional Terms and Conditions

- 2.a The visible particulate emissions limitation based on OAC rule 3745-17-07 is less stringent than the visible particulate emissions limitation established pursuant to 40 CFR Part 60, Subpart UU.
- 2.b In accordance with OAC rule 3745-21-09(L)(2), this storage tank is exempt from the requirements of OAC rule 3745-21-09(L)(1) because the tank has a capacity of less than 40,000 gallons.

II. Operational Restrictions

1. The average combustion temperature within the thermal incinerator, for any 3-hour block of time when the emissions unit is in operation, shall not be less than 1450 degrees Fahrenheit.

III. Monitoring and/or Record Keeping Requirements

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

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

- a. all 3-hour blocks of time during which the average combustion temperature within the thermal incinerator, when the emissions unit was in operation, was less than 1450 degrees Fahrenheit; and
 - b. a log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.
2. The permittee shall 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 emission incident; and
 - e. any corrective actions taken to eliminate the visible emissions.

IV. Reporting Requirements

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

V. Testing Requirements

1. Compliance with the emission limitation in section A.I.1 of these terms and conditions shall be determined in accordance with the following method:

1.a Emission Limitation:

visible emissions to the ambient air 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 clearing

Applicable Compliance Method:

Method 9 of 40 CFR Part 60, Appendix A

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
storage tank #52 - 30,000-gallon heated asphalt storage tank controlled with a thermal incinerator	none	none

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: #53 Storage Tank (T009)
Activity Description: Asphalt storage

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
storage tank #53 - 60,000-gallon heated asphalt storage tank controlled with a thermal incinerator	OAC rule 3745-17-07	See A.I.2.a below.
	OAC rule 3745-21-09(L)	exempt (see A.II.2)
	40 CFR Part 60, Subpart UU	visible emissions to the ambient air 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 clearing

2. Additional Terms and Conditions

- 2.a The visible particulate emissions limitation based on OAC rule 3745-17-07 is less stringent than the visible particulate emissions limitation established pursuant to 40 CFR Part 60, Subpart UU.

II. Operational Restrictions

- The average combustion temperature within the thermal incinerator, for any 3-hour block of time when the emissions unit is in operation, shall not be less than 1450 degrees Fahrenheit.
- 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.

III. Monitoring and/or Record Keeping Requirements

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

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

- a. all 3-hour blocks of time during which the average combustion temperature within the thermal incinerator, when the emissions unit was in operation, was less than 1450 degrees Fahrenheit; and
 - b. a log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.
2. The permittee shall maintain 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.
 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 emission incident; and
 - e. any corrective actions taken to eliminate the visible emissions.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which identify all 3-hour blocks of time during which the average combustion temperature within the thermal incinerator does not comply with the temperature limitation specified above.
2. These deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c of this permit.
3. If the permittee places, stores, or holds in the fixed roof tank any petroleum liquid with a true vapor pressure which 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.
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 (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.

V. Testing Requirements

1. Compliance with the emission limitation in section A.I.1 of these terms and conditions shall be determined in accordance with the following method:

Facility Name: **Owens Corning, Medina Plant**

Facility ID: **16-52-05-0040**

Emissions Unit: **#53 Storage Tank (T009)**

V. Testing Requirements (continued)

1.a Emission Limitation:

visible emissions to the ambient air 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 clearing

Applicable Compliance Method:

Method 9 of 40 CFR Part 60, Appendix A

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
storage tank #53 - 60,000-gallon heated asphalt storage tank controlled with a thermal incinerator	none	none

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: #60 Storage Tank (T010)
Activity Description: Mineral Spirits storage

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
#60 solvent storage tank - 28,600-gallon fixed roof solvent storage tank	OAC rule 3745-21-09(L)(2)	exempt (see A.I.2.a)

2. Additional Terms and Conditions

- 2.a In accordance with OAC rule 3745-21-09(L)(2), this storage tank is exempt from the requirements of OAC rule 3745-21-09(L)(1) because the tank has a capacity of less than 40,000 gallons.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
#60 solvent storage tank - 28,600-gallon fixed roof solvent storage tank	OAC rule 3745-31-05 (PTI 16-1620)	0.20 tpy of organic compounds (OC)

2. Additional Terms and Conditions

- 2.a The fixed roof storage tank shall be equipped with a submerged filling pipe and shall vent to a water cooled vapor condenser.

II. Operational Restrictions

1. The water temperature exiting the condenser shall be continuously maintained at a value of not greater than 87 degrees Fahrenheit at all times while the emissions unit is in operation.
2. The permittee is not required to operate the condenser during mineral spirit unloading when the ambient temperature is less than 45 degrees F.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly install, operate and maintain equipment to continuously monitor and record the water temperature exiting the condenser while the emissions unit is in operation. The temperature monitor and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

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

- a. the outlet water temperature, on a once/shift basis; and
- b. a log or record of operating time for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit.

IV. Reporting Requirements

1. The permittee shall submit outlet water temperature deviation (excursion) reports that identify all periods of time during which the water temperature exiting the condenser did not comply with the temperature requirements specified above.
2. The deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition B.2 of this permit.

V. Testing Requirements

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

Facility Name: **Owens Corning, Medina Plant**

Facility ID: **16-52-05-0040**

Emissions Unit: **#60 Storage Tank (T010)**

V. Testing Requirements (continued)

1.a Emission Limitation:

0.20 tpy of OC

Applicable Compliance Method:

OC emissions from the storage tank shall be determined using USEPA's "Tanks Program 3.1." or AP-42 emission factors for working and breathing loss calculations.

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: #62 Storage Tank (T011)
Activity Description: Cutback asphalt blend, cooling, and storage

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
#62 cutback storage tank - 100,000-gallon fixed roof asphalt cutback storage tank (heated)	OAC rule 3745-21-09(L)(1)	exempt (see A.II.1)

2. Additional Terms and Conditions

None

II. Operational Restrictions

1. 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.

III. Monitoring and/or Record Keeping Requirements

1. 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.

IV. Reporting Requirements

1. If the permittee places, stores, or holds in the fixed roof tank any petroleum liquid with a true vapor pressure which 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.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
#62 cutback storage tank - 100,000-gallon fixed roof asphalt cutback storage tank (heated)	OAC rule 3745-31-05 (PTI 16-1620)	0.66 tpy of organic compounds (OC)

2. Additional Terms and Conditions

- 2.a** The fixed roof storage tank shall be equipped with a submerged filling pipe and shall vent to a water cooled vapor condenser.
- 2.b** The permittee shall only store cutback asphalts in this emissions unit.

II. Operational Restrictions

1. 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.
2. The water temperature exiting the condenser shall be continuously maintained at a value of not greater than 87 degrees Fahrenheit at all times while the emissions unit is in operation.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly install, operate and maintain equipment to continuously monitor and record the water temperature exiting the condenser while the emissions unit is in operation. The temperature monitor and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

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

- a. the outlet water temperature, on a once/shift basis; and
- b. a log or record of operating time for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit.

IV. Reporting Requirements

1. The permittee shall submit outlet water temperature deviation (excursion) reports that identify all periods of time during which the water temperature exiting the condenser did not comply with the temperature requirements specified above.
2. The deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition B.2 of this permit.

V. Testing Requirements

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

Facility Name: **Owens Corning, Medina Plant**

Facility ID: **16-52-05-0040**

Emissions Unit: **#62 Storage Tank (T011)**

V. Testing Requirements (continued)

1.a Emission Limitation:

0.66 tpy of OC

Applicable Compliance Method:

OC emissions from the storage tank shall be determined using USEPA's "Tanks Program 3.1." or AP-42 emission factors for working and breathing loss calculations.

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: #65 Storage Tank (T012)
Activity Description: Cutback asphalt blend, cooling, and storage

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
#65 asphalt cutback storage tank - 28,600-gallon fixed roof asphalt cutback storage tank (heated)	OAC rule 3745-21-09(L)(2)	exempt (see A.I.2.a)

2. Additional Terms and Conditions

- 2.a In accordance with OAC rule 3745-21-09(L)(2), this storage tank is exempt from the requirements of OAC rule 3745-21-09(L)(1) because the tank has a capacity of less than 40,000 gallons.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
#65 asphalt cutback storage tank - 28,600-gallon fixed roof asphalt cutback storage tank (heated)	OAC rule 3745-31-05 (PTI 16-1620)	1.79 tpy of organic compounds (OC)

2. Additional Terms and Conditions

- 2.a The fixed roof storage tank shall be equipped with a submerged filling pipe and shall vent to a water cooled vapor condenser.

II. Operational Restrictions

1. The water temperature exiting the condenser shall be continuously maintained at a value of not greater than 87 degrees Fahrenheit at all times while the emissions unit is in operation.
2. The permittee shall only store cutback asphalt in this emissions unit.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly install, operate and maintain equipment to continuously monitor and record the water temperature exiting the condenser while the emissions unit is in operation. The temperature monitor and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

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

- a. the outlet water temperature, on a once/shift basis; and
- b. a log or record of operating time for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit.

IV. Reporting Requirements

1. The permittee shall submit outlet water temperature deviation (excursion) reports that identify all periods of time during which the water temperature exiting the condenser did not comply with the temperature requirements specified above.
2. The deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition B.2 of this permit.

V. Testing Requirements

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

Facility Name: **Owens Corning, Medina Plant**

Facility ID: **16-52-05-0040**

Emissions Unit: **#65 Storage Tank (T012)**

V. Testing Requirements (continued)

1.a Emission Limitation:

1.79 tpy of OC

Applicable Compliance Method:

OC emissions from the storage tank shall be determined using USEPA's "Tanks Program 3.1." or AP-42 emission factors for working and breathing loss calculations.

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: #66 Storage Tank (T013)
Activity Description: Cutback asphalt blend, cooling, and storage

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
#66 asphalt cutback storage tank - 28,600-gallon fixed roof asphalt cutback storage tank (heated)	OAC rule 3745-21-09(L)(2)	exempt (see A.I.2.a)

2. Additional Terms and Conditions

- 2.a In accordance with OAC rule 3745-21-09(L)(2), this storage tank is exempt from the requirements of OAC rule 3745-21-09(L)(1) because the tank has a capacity of less than 40,000 gallons.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
#66 asphalt cutback storage tank - 28,600-gallon fixed roof asphalt cutback storage tank (heated)	OAC rule 3745-31-05 (PTI 16-1620)	1.13 tpy of organic compounds (OC)

2. Additional Terms and Conditions

- 2.a The fixed roof storage tank shall be equipped with a submerged filling pipe and shall vent to a water cooled vapor condenser.

II. Operational Restrictions

1. The water temperature exiting the condenser shall be continuously maintained at a value of not greater than 87 degrees Fahrenheit at all times while the emissions unit is in operation.
2. The permittee shall only store cutback asphalt in this emissions unit.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly install, operate and maintain equipment to continuously monitor and record the water temperature exiting the condenser while the emissions unit is in operation. The temperature monitor and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

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

- a. the outlet water temperature, on a once/shift basis; and
- b. a log or record of operating time for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit.

IV. Reporting Requirements

1. The permittee shall submit outlet water temperature deviation (excursion) reports that identify all periods of time during which the water temperature exiting the condenser did not comply with the temperature requirements specified above.
2. The deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition B.2 of this permit.

V. Testing Requirements

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

Facility Name: **Owens Corning, Medina Plant**

Facility ID: **16-52-05-0040**

Emissions Unit: **#66 Storage Tank (T013)**

V. Testing Requirements (continued)

1.a Emission Limitation:

1.13 tpy of OC

Applicable Compliance Method:

OC emissions from the storage tank shall be determined using USEPA's "Tanks Program 3.1." or AP-42 emission factors for working and breathing loss calculations.

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: #26 Storage Tank (T014)
Activity Description: Asphalt storage

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
#26 storage tank - fixed roof asphalt store tank; 29,000-gallons	OAC rule 3745-21-09(L)	exempt (see A.I.2.a)

2. Additional Terms and Conditions

- 2.a In accordance with OAC rule 3745-21-09(L)(2), this storage tank is exempt from the requirements of OAC rule 3745-21-09(L)(1) because the tank has a capacity of less than 40,000 gallons.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
#26 storage tank - fixed roof asphalt store tank; 29,000-gallons	none	none

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: #27 Storage Tank (T015)
Activity Description: Asphalt storage

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
#27 storage tank - fixed roof asphalt store tank; 29,000-gallons	OAC rule 3745-21-09(L)	exempt (see A.I.2.a)

2. Additional Terms and Conditions

- 2.a In accordance with OAC rule 3745-21-09(L)(2), this storage tank is exempt from the requirements of OAC rule 3745-21-09(L)(1) because the tank has a capacity of less than 40,000 gallons.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
#27 storage tank - fixed roof asphalt store tank; 29,000-gallons	none	none

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: #30 Storage Tank (T016)
Activity Description: Asphalt storage

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
#30 storage tank - fixed roof asphalt store tank; 18,500-gallons	OAC rule 3745-21-09(L)	exempt (see A.I.2.a)

2. Additional Terms and Conditions

- 2.a In accordance with OAC rule 3745-21-09(L)(2), this storage tank is exempt from the requirements of OAC rule 3745-21-09(L)(1) because the tank has a capacity of less than 40,000 gallons.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
#30 storage tank - fixed roof asphalt store tank; 18,500-gallons	none	none

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: #31 Storage Tank (T017)
Activity Description: Asphalt storage

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
#31 storage tank - fixed roof asphalt store tank; 18,500-gallons	OAC rule 3745-21-09(L)	exempt (see A.I.2.a)

2. Additional Terms and Conditions

- 2.a In accordance with OAC rule 3745-21-09(L)(2), this storage tank is exempt from the requirements of OAC rule 3745-21-09(L)(1) because the tank has a capacity of less than 40,000 gallons.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
#31 storage tank - fixed roof asphalt store tank; 18,500-gallons	none	none

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: #40 Storage Tank (T018)
Activity Description: Asphalt storage

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
#40 storage tank - fixed roof asphalt store tank; 18,000-gallons	OAC rule 3745-21-09(L)	exempt (see A.I.2.a)

2. Additional Terms and Conditions

- 2.a In accordance with OAC rule 3745-21-09(L)(2), this storage tank is exempt from the requirements of OAC rule 3745-21-09(L)(1) because the tank has a capacity of less than 40,000 gallons.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
#40 storage tank - fixed roof asphalt store tank; 18,000-gallons	none	none

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: #41 Storage Tank (T019)
Activity Description: Asphalt storage

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
#41 storage tank - fixed roof asphalt store tank; 18,000-gallons	OAC rule 3745-21-09(L)	exempt (see A.I.2.a)

2. Additional Terms and Conditions

- 2.a In accordance with OAC rule 3745-21-09(L)(2), this storage tank is exempt from the requirements of OAC rule 3745-21-09(L)(1) because the tank has a capacity of less than 40,000 gallons.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
#41 storage tank - fixed roof asphalt store tank; 18,000-gallons	none	none

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: #42 Storage Tank (T020)

Activity Description: Asphalt storage

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
#42 storage tank - fixed roof asphalt storage tank; 18,000-gallons	OAC rule 3745-21-09(L)	exempt (see A.I.2.a)

2. Additional Terms and Conditions

- 2.a In accordance with OAC rule 3745-21-09(L)(2), this storage tank is exempt from the requirements of OAC rule 3745-21-09(L)(1) because the tank has a capacity of less than 40,000 gallons.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
#42 storage tank - fixed roof asphalt storage tank; 18,000-gallons	none	none

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: #32 Storage Tank (T021)
Activity Description: Asphalt storage

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
#32 storage tank - fixed roof asphalt storage tank; 18,500-gallons	OAC rule 3745-21-09(L)	exempt (see A.I.2.a)

2. Additional Terms and Conditions

- 2.a In accordance with OAC rule 3745-21-09(L)(2), this storage tank is exempt from the requirements of OAC rule 3745-21-09(L)(1) because the tank has a capacity of less than 40,000 gallons.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
#32 storage tank - fixed roof asphalt storage tank; 18,500-gallons	none	none

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: #64 Storage Tank (T022)
Activity Description: Cutback asphalt blend, cooling, and storage

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
#64 asphalt cutback storage tank - 28,600-gallon fixed roof asphalt cutback storage tank (heated)	OAC rule 3745-21-09(L)(2)	exempt (see A.I.2.a)

2. Additional Terms and Conditions

- 2.a In accordance with OAC rule 3745-21-09(L)(2), this storage tank is exempt from the requirements of OAC rule 3745-21-09(L)(1) because the tank has a capacity of less than 40,000 gallons.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
#64 asphalt cutback storage tank - 28,600-gallon fixed roof asphalt cutback storage tank (heated)	OAC rule 3745-31-05 (PTI 16-1620)	2.38 tpy of organic compounds (OC)

2. Additional Terms and Conditions

- 2.a The fixed roof storage tank shall be equipped with a submerged filling pipe and shall vent to a water cooled vapor condenser.

II. Operational Restrictions

1. The water temperature exiting the condenser shall be continuously maintained at a value of not greater than 87 degrees Fahrenheit at all times while the emissions unit is in operation.
2. The permittee shall only store cutback asphalts in this emissions unit.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly install, operate and maintain equipment to continuously monitor and record the water temperature exiting the condenser while the emissions unit is in operation. The temperature monitor and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

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

- a. the outlet water temperature, on a once/shift basis; and
- b. a log or record of operating time for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit.

IV. Reporting Requirements

1. The permittee shall submit outlet water temperature deviation (excursion) reports that identify all periods of time during which the water temperature exiting the condenser did not comply with the temperature requirements specified above.
2. The deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition B.2 of this permit.

V. Testing Requirements

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

Facility Name: **Owens Corning, Medina Plant**

Facility ID: **16-52-05-0040**

Emissions Unit: **#64 Storage Tank (T022)**

V. Testing Requirements (continued)

1.a Emission Limitation:

2.38 tpy of OC

Applicable Compliance Method:

OC emissions from the storage tank shall be determined using USEPA's "Tanks Program 3.1." or AP-42 emission factors for working and breathing loss calculations.

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: #63 Storage Tank (T023)
Activity Description: Cutback asphalt blend, cooling, and storage

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
#63 asphalt cutback storage tank - 28,600-gallon fixed roof asphalt cutback storage tank (heated)	OAC rule 3745-21-09(L)(2) 40 CFR Part 60, Subpart Kb	exempt (see A.I.2.a) See A.III and A.IV below.

2. Additional Terms and Conditions

- 2.a In accordance with OAC rule 3745-21-09(L)(2), this storage tank is exempt from the requirements of OAC rule 3745-21-09(L)(1) because the tank has a capacity of less than 40,000 gallons.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall keep copies of all reports and records required by this permit for a minimum of two years except for the requirements of section A.III.2. The records required by section A.III.2 of this permit shall be kept for the life of the source.
2. The permittee shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel.
3. The permittee shall maintain a records of 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.

IV. Reporting Requirements

1. The permittee shall notify the Administrator within 30 days when the maximum true vapor pressure of the liquid exceeds 76.6 kPa.

V. Testing Requirements

1. Available data on the storage temperature may be used to determine true vapor pressue as determined below.
 - 1.a For vessels operated above or below ambient temperatures, the maximum true vapor pressure is calculated based on the highest expected calendar month average of the storage temperature. For vessels operated at ambient temperatures, the maximum true vapor pressure is calculated based upon the maximum local monthly average ambient temperature as reported by the National Weather Service.

V. Testing Requirements (continued)

- 1.b** For crude oil or refined petroleum products the vapor pressure and maximum expected storage temperature based on highest expected calendar-month average temperature of stored product may be used to determine the maximum true vapor pressure from nomographs contained in API Bulletin 2517 unless the Administrator specifically requests that the liquid be sampled.
- 1.c** For other liquids, vapor pressure may be determined from standard reference texts, or determined by ASTM Method D2879-83, or measured by an appropriate method approved by the Administrator, or calculated by an appropriate method approved by the Administrator.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
#63 asphalt cutback storage tank - 28,600-gallon fixed roof asphalt cutback storage tank (heated)	OAC rule 3745-31-05 (PTI 16-1620)	2.80 tpy of organic compounds (OC)

2. Additional Terms and Conditions

- 2.a The fixed roof storage tank shall be equipped with a submerged filling pipe and shall vent to a water cooled vapor condenser.

II. Operational Restrictions

1. The water temperature exiting the condenser shall be continuously maintained at a value of not greater than 87 degrees Fahrenheit at all times while the emissions unit is in operation.
2. The permittee shall only store cutback asphalts in this emissions unit.
3. The permittee shall not place, store, or hold in this fixed roof tank any petroleum liquid which, as stored, has a maximum true vapor pressure greater than 4.0 pounds per square inch absolute.
4. The permittee shall not store waste or waste mixtures in this vessel.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly install, operate and maintain equipment to continuously monitor and record the water temperature exiting the condenser while the emissions unit is in operation. The temperature monitor and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

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

- a. the outlet water temperature, on a once/shift basis; and
 - b. a log or record of operating time for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit.
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.

IV. Reporting Requirements

1. The permittee shall submit outlet water temperature deviation (excursion) reports that identify all periods of time during which the water temperature exiting the condenser did not comply with the temperature requirements specified above.

IV. Reporting Requirements (continued)

2. The permittee shall submit deviation (excursion) reports that identify all periods of time during which the maximum true vapor pressure exceeded 4.0 pounds per square inch absolute.
3. The deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition B.2 of this permit.

V. Testing Requirements

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

- 1.a Emission Limitation:

2.80 tpy of OC

Applicable Compliance Method:

OC emissions from the storage tank shall be determined using USEPA's "Tanks Program 3.1." or AP-42 emission factors for working and breathing loss calculations.

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: #28 Storage Tank (T026)
Activity Description: Asphalt storage

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
29,000-gallon asphalt storage tank - tank #28 controlled with a thermal incinerator	OAC rule 3745-21-09(L)(2)	See A.I.2.a below.
	40 CFR Part 60, Subpart UU	See A.I.2.b below.
	40 CFR Part 60, Subpart Kb	See A.III.2 below.

2. Additional Terms and Conditions

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

II. Operational Restrictions

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

III. Monitoring and/or Record Keeping Requirements

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

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

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

IV. Reporting Requirements

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

V. Testing Requirements

1. Compliance with the emission limitation in section A.I.1 of these terms and conditions shall be determined in accordance with the following method:
 - 1.a Emission Limitation:

0% opacity

Applicable Compliance Method:

OAC rule 3745-17-03(B)(1)

Facility Name: **Owens Corning, Medina Plant**
Facility ID: **16-52-05-0040**
Emissions Unit: **#28 Storage Tank (T026)**

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
29,000-gallon asphalt storage tank - tank #28 controlled with a thermal incinerator	none	none

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: #29 Storage Tank (T027)
Activity Description: Asphalt storage

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
storage tank #29 - 100,000-gallon heated asphalt storage tank controlled with a thermal incinerator	OAC rule 3745-17-07	See A.I.2.a below.
	OAC rule 3745-21-09(L)	exempt (see A.II.2)
	40 CFR Part 60, Subpart UU	Visible emissions to the ambient air 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 clearing.
	40 CFR Part 60, Subpart Kb	95% control efficiency of VOC

2. Additional Terms and Conditions

- 2.a The visible particulate emissions limitation based on OAC rule 3745-17-07 is less stringent than the visible particulate emissions limitation established pursuant to 40 CFR Part 60, Subpart UU.

II. Operational Restrictions

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

III. Monitoring and/or Record Keeping Requirements

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

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

- a. all 3-hour blocks of time during which the average combustion temperature within the thermal incinerator, when the emissions unit was in operation, was less than 1450 degrees Fahrenheit or more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance; and
 - b. a log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.
2. The permittee shall maintain 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.
 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 emission incident; and
 - e. any corrective actions taken to eliminate the visible emissions.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which identify all 3-hour blocks of time during which the average combustion temperature within the thermal incinerator does not comply with the temperature limitation specified above.
2. These deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c of this permit.
3. If the permittee places, stores, or holds in the fixed roof tank any petroleum liquid with a true vapor pressure which 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.
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 (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.

V. Testing Requirements

1. 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 6 months after permit issuance.
 - b. The emission testing shall be conducted to demonstrate compliance with the control efficiency for VOC.
 - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): "for VOCs, Method 25 or 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.

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).

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

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

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

2.a Emission Limitation:

Visible emissions to the ambient air 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 clearing.

Applicable Compliance Method:

Method 9 of 40 CFR Part 60, Appendix A

2.b Emission Limitation:

95% control efficiency of VOC

Applicable Compliance Method:

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

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
storage tank #29 - 100,000 gallon heated asphalt storage tank controlled with a thermal incinerator	OAC rule 3745-31-05 (PTI 16-600)	none

2. Additional Terms and Conditions

- 2.a The emissions unit shall be equipped with a submerged fill pipe.

II. Operational Restrictions

1. The permittee shall only burn natural gas as fuel in the tank heater associated with this emissions unit.

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: #44 Storage Tank (T029)
Activity Description: Asphalt storage

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
storage tank #44 - 400,000-gallon heated asphalt storage tank controlled with a thermal incinerator	OAC rule 3745-17-07	See A.I.2.a below.
	OAC rule 3745-21-09(L)	exempt (see A.II.1)
	40 CFR Part 60, Subpart UU	Visible emissions to the ambient air 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 clearing.
	40 CFR Part 60, Subpart Kb	95% control efficiency of VOC

2. Additional Terms and Conditions

- 2.a The visible particulate emissions limitation based on OAC rule 3745-17-07 is less stringent than the visible particulate emissions limitation established pursuant to 40 CFR Part 60, Subpart UU.

II. Operational Restrictions

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

III. Monitoring and/or Record Keeping Requirements

1. 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.

III. Monitoring and/or Record Keeping Requirements (continued)

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

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

- a. all 3-hour blocks of time during which the average combustion temperature within the thermal incinerator, when the emissions unit was in operation, was less than 1450 degrees Fahrenheit or more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance; and
 - b. a log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.
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 emission incident; and
 - e. any corrective actions taken to eliminate the visible emissions.

IV. Reporting Requirements

1. If the permittee places, stores, or holds in the fixed roof tank any petroleum liquid with a true vapor pressure which 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.
2. The permittee shall submit deviation (excursion) reports which identify all 3-hour blocks of time during which the average combustion temperature within the thermal incinerator does not comply with the temperature limitation specified above.
3. These deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c of this permit.
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 (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.

V. Testing Requirements

1. 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 6 months after permit issuance.
 - b. The emission testing shall be conducted to demonstrate compliance with the allowable control efficiency for VOC.
 - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): "for VOCs, Method 25 or 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.

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).

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

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

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

2.a Emission Limitation:

Visible emissions to the ambient air 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 clearing.

Applicable Compliance Method:

Method 9 of 40 CFR Part 60, Appendix A

2.b Emission Limitation:

95% control efficiency of VOC

Applicable Compliance Method:

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

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
storage tank #44 - 400,000-gallon heated asphalt storage tank controlled with a thermal incinerator	OAC rule 3745-31-05 (PTI 16-1595)	0.22 lb/hr of PM10 2.0 lbs/hr of volatile organic compounds (VOC) 0.5 lb/hr of NOx 1.75 lbs/hr of carbon monoxide (CO)

2. Additional Terms and Conditions

- 2.a The emissions unit shall be equipped with a submerged fill pipe.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

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

1.a Emission Limitation:

0.22 lb/hr of PM10

Applicable Compliance Method:

If required, compliance with this mass emission limitation shall be based on stack testing per OAC rule 3745-17-03(B)(10).

1.b Emission Limitation:

2.0 lbs/hr of VOC

Applicable Compliance Method:

If required, compliance with this mass emission limitation shall be based on stack testing per Method 25, 40 CFR 60, Appendix A.

V. Testing Requirements (continued)

1.c Emission Limitation:

0.5 lb/hr of NO_x

Applicable Compliance Method:

If required, compliance with this mass emission limitation shall be based on stack testing per Method 7, 40 CFR 60, Appendix A.

1.d Emission Limitation:

1.75 lbs/hr of CO

Applicable Compliance Method:

If required, compliance with this mass emission limitation shall be based on stack testing per Method 10, 40 CFR 60, Appendix A.

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: #36 Storage Tank (T030)
Activity Description: Coating storage tank

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
coating storage tank #36 - 100,000-gallon fixed roof asphalt storage tank/coating tank controlled with a thermal incinerator	OAC rule 3745-21-09(L)(1)(a)(ii)	See A.I.2.a below.
	40 CFR Part 60, Subpart Kb	See A.I.2.b below.
	40 CFR Part 60, Subpart UU	See A.I.2.c below.

2. Additional Terms and Conditions

- 2.a The emissions unit shall be equipped with a submerged filling pipe and shall vent to a fume incinerator to control asphalt fumes.
- 2.b 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 designed and operated to reduce inlet VOC emissions by 95 percent or greater.
- 2.c Visible emissions to the atmosphere shall not exceed 0% opacity, except for one consecutive 15-minute period in any 24-hour period when the transfer lines are being blown for cleaning. The control device shall not be bypassed during this 15-minute period.

II. Operational Restrictions

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

II. Operational Restrictions (continued)

2. 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 level 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 seconds 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.

III. Monitoring and/or Record Keeping Requirements

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

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

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

III. Monitoring and/or Record Keeping Requirements (continued)

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 emission incident; and
 - e. any corrective actions taken to eliminate the visible emissions.

IV. Reporting Requirements

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

V. Testing Requirements

1. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:
 - 1.a Emission Limitation:

0% opacity

Applicable Compliance Method:

OAC rule 3745-17-03(B)(1)
 - 1.b Emission Limitation:

95% control efficiency

Applicable Compliance Method:

Testing shall be conducted as specified in section A.V.1 above.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
coating storage tank #36 - 100,000-gallon fixed roof asphalt storage tank/coating tank controlled with a thermal incinerator	OAC rule 3745-31-05 (PTI 16-1622)	1.51 lbs/hr of sulfur dioxide (SO ₂) 0.32 lb/hr of carbon monoxide (CO) 0.40 lb/hr of volatile organic compounds (VOC) 0.11 lb/hr of particulates (PM ₁₀)

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

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

1.a Emission Limitation:

1.51 lbs/hr of SO₂

Applicable Compliance Method:

Stack testing may be required in the future in accordance with approved U.S. EPA procedures and test method(s).

1.b Emission Limitation:

0.32 lb/hr of CO

Applicable Compliance Method:

Stack testing may be required in the future in accordance with approved U.S. EPA procedures and test method(s).

V. Testing Requirements (continued)

1.c Emission Limitation:

0.4 lb/hr of VOC

Applicable Compliance Method:

Stack testing may be required in the future in accordance with the procedures and test method(s) in OAC rule 3745-21-10(C).

1.d Emission Limitation:

0.11 lb/hr of PM10

Applicable Compliance Method:

Stack testing may be required in the future in accordance with Method 201, 40 CFR 51, Appendix M.

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: #51 Storage Tank (T031)
Activity Description: Asphalt storage

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
29,600-gallon asphalt storage tank - tank #51 controlled with a thermal incinerator	OAC rule 3745-21-09(L)(2)	See A.I.2.a below.
	40 CFR Part 60, Subpart UU	See A.I.2.b below.
	40 CFR Part 60, Subpart Kb	See A.III.2 below.

2. Additional Terms and Conditions

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

II. Operational Restrictions

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

III. Monitoring and/or Record Keeping Requirements

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

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

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

IV. Reporting Requirements

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

V. Testing Requirements

1. Compliance with the emission limitation in section A.I.1 of these terms and conditions shall be determined in accordance with the following method:
 - 1.a Emission Limitation:

0% opacity

Applicable Compliance Method:

OAC rule 3745-17-03(B)(1)

Facility Name: **Owens Corning, Medina Plant**
Facility ID: **16-52-05-0040**
Emissions Unit: **#51 Storage Tank (T031)**

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
29,600-gallon asphalt storage tank - tank #51 controlled with a thermal incinerator	OAC rule 3745-31-05 (PTI 16-1825)	2.01 tpy of sulfur dioxide (SO ₂) 0.05 tpy of carbon monoxide (CO) 1.0 tpy of organic compounds (OC) 0.3 tpy of particulates

2. Additional Terms and Conditions

- 2.a The fixed roof storage tank shall be equipped with a submerged filling pipe and shall vent to a fume incinerator to control asphalt fumes.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

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

1.a Emission Limitation:

2.01 tpy of SO₂

Applicable Compliance Method:

Compliance with the SO₂ 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 16-1825.

V. Testing Requirements (continued)

1.b Emission Limitation:

0.05 tpy of CO

Applicable Compliance Method:

Compliance with the CO 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 16-1825.

1.c Emission Limitation:

1.0 tpy of OC

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 16-1825.

1.d Emission Limitation:

0.3 tpy of particulates

Applicable Compliance Method:

Compliance with the particulate matter 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 16-1825.

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: #59 Storage Tank (T032)
Activity Description: Cutback asphalt blend, cooling, and storage

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
29,600-gallon cutback asphalt storage/mixing tank - tank #59	OAC rule 3745-21-09(L)(2) 40 CFR Part 60, Subpart Kb	exempt (see A.I.2.a) See A.III.1 below.

2. Additional Terms and Conditions

- 2.a In accordance with OAC rule 3745-21-09(L)(2), this storage tank is exempt from the requirements of OAC rule 3745-21-09(L)(1) because the tank has a capacity of less than 40,000 gallons.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel for the life of the source.

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
29,600-gallon cutback asphalt storage/mixing tank - tank #59	OAC rule 3745-31-05 (PTI 16-1825)	1.53 tpy of organic compounds (OC)

2. Additional Terms and Conditions

- 2.a The fixed roof storage tank shall be equipped with a submerged filling pipe and shall vent to a condenser.

II. Operational Restrictions

1. The water temperature exiting the condenser shall be continuously maintained at a value of not greater than 87 degrees Fahrenheit at all times while the emissions unit is in operation.
2. The permittee shall only store cutback asphalt in this emissions unit.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly install, operate and maintain equipment to continuously monitor and record the water temperature exiting the condenser while the emissions unit is in operation. The temperature monitor and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

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

- a. the outlet water temperature, on a once/shift basis;
- b. a log or record of operating time for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit.
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.

IV. Reporting Requirements

1. The permittee shall submit outlet water temperature deviation (excursion) reports that identify all periods of time during which the water temperature exiting the condenser did not comply with the temperature requirements specified above.
2. The deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition B.2 of this permit.

V. Testing Requirements

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

Facility Name: **Owens Corning, Medina Plant**

Facility ID: **16-52-05-0040**

Emissions Unit: **#59 Storage Tank (T032)**

V. Testing Requirements (continued)

1.a Emission Limitation:

1.53 tpy of OC

Applicable Compliance Method:

OC emissions from the storage tank shall be determined using USEPA's "Tanks Program 3.1." or AP-42 emission factors for working and breathing loss calculations.

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: #67 Storage Tank (T033)
Activity Description: Cutback asphalt blend, cooling, and storage

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
29,600-gallon cutback asphalt storage/mixing tank - tank #67	OAC rule 3745-21-09(L)(2) 40 CFR Part 60, Subpart Kb	exempt (see A.I.2.a) See A.III.1 below.

2. Additional Terms and Conditions

- 2.a In accordance with OAC rule 3745-21-09(L)(2), this storage tank is exempt from the requirements of OAC rule 3745-21-09(L)(1) because the tank has a capacity of less than 40,000 gallons.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel for the life of the source.

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
29,600-gallon cutback asphalt storage/mixing tank - tank #67	OAC rule 3745-31-05 (PTI 16-1825)	1.53 tpy of organic compounds (OC)

2. Additional Terms and Conditions

- 2.a The fixed roof storage tank shall be equipped with a submerged filling pipe and shall vent to a condenser.

II. Operational Restrictions

1. The water temperature exiting the condenser shall be continuously maintained at a value of not greater than 87 degrees Fahrenheit at all times while the emissions unit is in operation.
2. The permittee shall only store cutback asphalt in this emissions unit.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly install, operate and maintain equipment to continuously monitor and record the water temperature exiting the condenser while the emissions unit is in operation. The temperature monitor and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

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

- a. the outlet water temperature, on a once/shift basis; and
 - b. a log or record of operating time for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit.
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.

IV. Reporting Requirements

1. The permittee shall submit outlet water temperature deviation (excursion) reports that identify all periods of time during which the water temperature exiting the condenser did not comply with the temperature requirements specified above.
2. The deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition B.2 of this permit.

V. Testing Requirements

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

Facility Name: **Owens Corning, Medina Plant**

Facility ID: **16-52-05-0040**

Emissions Unit: **#67 Storage Tank (T033)**

V. Testing Requirements (continued)

1.a Emission Limitation:

1.53 tpy of OC

Applicable Compliance Method:

OC emissions from the storage tank shall be determined using USEPA's "Tanks Program 3.1." or AP-42 emission factors for working and breathing loss calculations.

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: #1 Storage Tank (T101)
Activity Description: Asphalt storage

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
#1 storage tank - fixed roof asphalt storage tank; 29,000-gallons	OAC rule 3745-21-09(L)	exempt (see A.I.2.a)

2. Additional Terms and Conditions

- 2.a In accordance with OAC rule 3745-21-09(L)(2), this storage tank is exempt from the requirements of OAC rule 3745-21-09(L)(1) because the tank has a capacity of less than 40,000 gallons.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
#1 storage tank - fixed roof asphalt storage tank; 29,000-gallons	none	none

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: #2 Storage Tank (T102)
Activity Description: Asphalt storage

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
#2 storage tank - fixed roof asphalt storage tank; 29,000-gallons	OAC rule 3745-21-09(L)	exempt (see A.I.2.a)

2. Additional Terms and Conditions

- 2.a In accordance with OAC rule 3745-21-09(L)(2), this storage tank is exempt from the requirements of OAC rule 3745-21-09(L)(1) because the tank has a capacity of less than 40,000 gallons.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
#2 storage tank - fixed roof asphalt storage tank; 29,000-gallons	none	none

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Pouring Shed (Z004)

Activity Description: Fugitive Source - The pouring of finished asphalt into drums.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
pouring shed - pouring of finished asphalt into drums	OAC rule 3745-17-07(B) OAC rule 3745-17-08	See A.I.2.a below. The permittee shall control the pouring temperature to the lowest practical temperature to minimize or eliminate visible particulate emissions of fugitive dust.

2. Additional Terms and Conditions

- 2.a Visible particulate fugitive emissions shall not exceed 20% opacity as a 3-minute average.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive emissions and 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 emission incident; and
 - e. any corrective actions taken to eliminate the visible emissions.

IV. Reporting Requirements

1. The permittee shall submit semiannual written reports which (a) identify all days during which any visible fugitive and/or stack particulate emissions were observed from this emissions unit 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.

Facility Name: **Owens Corning, Medina Plant**

Facility ID: **16-52-05-0040**

Emissions Unit: **Pouring Shed (Z004)**

V. Testing Requirements

1. Compliance with the emission limitation in section A.I.2 of these terms and conditions shall be determined in accordance with the following method:

1.a Emission Limitation:

20% opacity as a 3-minute average

Applicable Compliance Method:

OAC rule 3745-17-03(B)(3)

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
pouring shed - pouring of finished asphalt into drums	none	none

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Material Surfacing Applicator #1 (Z006)
Activity Description: Applies of surfacing materials

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
material surfacing applicator #1 with two baghouses	OAC rule 3745-17-07(A)	See A.I.2.a below.
	OAC rule 3745-17-07(B)	See A.I.2.b below.
	OAC rule 3745-17-08(B)	The applicator shall be adequately enclosed and vented to two baghouses.
	OAC rule 3745-17-11	46.0 lbs/hr of particulates (based on 58.5 tons/hr maximum process weight rate)

2. Additional Terms and Conditions

- 2.a Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by rule.
- 2.b Visible particulate fugitive emissions shall not exceed 20% opacity as a 3-minute average.

II. Operational Restrictions

1. The pressure drop across each baghouse shall be maintained within the range of 0.5 to 5 inches of water while the emissions unit is in operation.

III. Monitoring and/or Record Keeping Requirements

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

III. Monitoring and/or Record Keeping Requirements (continued)

2. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive emissions and 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 emission incident; and
 - e. any corrective actions taken to eliminate the visible emissions.

IV. Reporting Requirements

1. The permittee shall submit pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across either baghouse did not comply with the allowable range specified above.
2. The deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c of this permit.
3. The permittee shall submit semiannual written reports which (a) identify all days during which any visible fugitive and/or stack particulate emissions were observed from this emissions unit 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.

V. Testing Requirements

1. Compliance with the emission limitations in sections A.I.1 and A.I.2 of these terms and conditions shall be determined in accordance with the following methods:
 - 1.a Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

OAC rule 3745-17-03(B)(1)
 - 1.b Emission Limitation:

20% opacity as a 3-minute average

Applicable Compliance Method:

OAC rule 3745-17-03(B)(3)
 - 1.c Emission Limitation:

46.0 lbs/hr of particulates

Applicable Compliance Method:

Stack testing may be required in the future in accordance with the procedures and test method(s) in OAC rules 3745-17-03(B)(7) and 3745-17-03(B)(10).

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
material surfacing applicator #1 with two baghouses	none	none

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Cooling Section #1 (Z007)
Activity Description: Cooling of asphalt coated product

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
cooling section #1	OAC rule 3745-17-07(A)	See A.I.2.a below.
	OAC rule 3745-17-07(B)	See A.I.2.b below.
	OAC rule 3745-17-08(B)	The permittee shall operate the existing hood to minimize particulate emissions and fugitive dust.
	OAC rule 3745-17-11	46.0 lbs/hr particulates (based upon 58.4 tons per hour maximum process weight rate)

2. Additional Terms and Conditions

- 2.a Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by rule.
- 2.b Visible particulate fugitive emissions shall not exceed 20% opacity as a 3-minute average.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive emissions and 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 emission incident; and
 - e. any corrective actions taken to eliminate the visible emissions.

IV. Reporting Requirements

1. The permittee shall submit semiannual written reports which (a) identify all days during which any visible fugitive and/or stack particulate emissions were observed from this emissions unit 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.

V. Testing Requirements

1. Compliance with the emission limitations in sections A.I.1 and A.I.2 of these terms and conditions shall be determined in accordance with the following method(s):

- 1.a Emission Limitation:

20% opacity as a 6-minute average:

Applicable Compliance Method:

OAC rule 3745-17-03(B)(1)

- 1.b Emission Limitation:

20% opacity as a 3-minute average

Applicable Compliance Method:

OAC rule 3745-17-03(B)(3)

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
cooling section #1	none	none

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

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