



Environmental
Protection Agency

Ted Strickland, Governor
Lee Fisher, Lt. Governor
Chris Korleski, Director

9/23/2010

Certified Mail

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

RE: FINAL AIR POLLUTION PERMIT-TO-INSTALL
Facility ID: 1652050040
Permit Number: P0106754
Permit Type: Administrative Modification
County: Medina

No	TOXIC REVIEW
No	PSD
No	SYNTHETIC MINOR TO AVOID MAJOR NSR
No	CEMS
Yes	MACT/GACT
No	NSPS
No	NESHAPS
No	NETTING
No	MAJOR NON-ATTAINMENT
No	MODELING SUBMITTED

Dear Permit Holder:

Enclosed please find a final Air Pollution Permit-to-Install (PTI) which will allow you to install or modify the described emissions unit(s) in a manner indicated in the permit. Because this permit contains several conditions and restrictions, we urge you to read it carefully. Please complete a survey at www.epa.ohio.gov/dapc/permitsurvey.aspx and give us feedback on your permitting experience. We value your opinion.

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

Environmental Review Appeals Commission
309 South Fourth Street, Room 222
Columbus, OH 43215

The Ohio EPA is encouraging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Compliance Assistance and Pollution Prevention at (614) 644-3469. If you have any questions regarding this permit, please contact the Akron Regional Air Quality Management District. This permit can be accessed electronically on the Division of Air Pollution Control (DAPC) Web page, www.epa.ohio.gov/dapc by clicking the "Issued Air Pollution Control Permits" link.

Sincerely,

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

Cc: U.S. EPA
ARAQMD; Canada



FINAL

Division of Air Pollution Control
Permit-to-Install
for
Owens Corning Roofing and Asphalt, LLC

Facility ID: 1652050040
Permit Number: P0106754
Permit Type: Administrative Modification
Issued: 9/23/2010
Effective: 9/23/2010



Division of Air Pollution Control
Permit-to-Install
for
Owens Corning Roofing and Asphalt, LLC

Table of Contents

Authorization 1
A. Standard Terms and Conditions 3
1. Federally Enforceable Standard Terms and Conditions 4
2. Severability Clause 4
3. General Requirements 4
4. Monitoring and Related Record Keeping and Reporting Requirements 5
5. Scheduled Maintenance/Malfunction Reporting 6
6. Compliance Requirements 6
7. Best Available Technology 7
8. Air Pollution Nuisance 7
9. Reporting Requirements 7
10. Applicability 8
11. Construction of New Sources(s) and Authorization to Install 8
12. Permit-To-Operate Application 9
13. Construction Compliance Certification 9
14. Public Disclosure 10
15. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations 10
16. Fees 10
17. Permit Transfers 10
18. Risk Management Plans 10
19. Title IV Provisions 10
B. Facility-Wide Terms and Conditions 11
C. Emissions Unit Terms and Conditions 13
1. P913, MSA System #1 14

Authorization

Facility ID: 1652050040
Facility Description: Asphalt Felts and Coatings.
Application Number(s): M0000818
Permit Number: P0106754
Permit Description: Modification to better define potential to emit.
Permit Type: Administrative Modification
Permit Fee: \$625.00
Issue Date: 9/23/2010
Effective Date: 9/23/2010

This document constitutes issuance to:

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

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

Ohio EPA District Office or local air agency responsible for processing and administering your permit:

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

The above named entity is hereby granted a Permit-to-Install for the emissions unit(s) listed in this section pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this permit does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the emissions unit(s) of environmental pollutants will operate in compliance with applicable State and Federal laws and regulations, and does not constitute expressed or implied assurance that if constructed or modified in accordance with those plans and specifications, the above described emissions unit(s) of pollutants will be granted the necessary permits to operate (air) or NPDES permits as applicable.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency



Chris Korleski
Director



Authorization (continued)

Permit Number: P0106754
Permit Description: Modification to better define potential to emit.

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

Emissions Unit ID:	P913
Company Equipment ID:	MSA System #1
Superseded Permit Number:	16-1755
General Permit Category and Type:	Not Applicable



A. Standard Terms and Conditions

1. Federally Enforceable Standard Terms and Conditions

- a) All Standard Terms and Conditions are federally enforceable, with the exception of those listed below which are enforceable under State law only:
 - (1) Standard Term and Condition A.2.a), Severability Clause
 - (2) Standard Term and Condition A.3.c) through A. 3.e) General Requirements
 - (3) Standard Term and Condition A.6.c) and A. 6.d), Compliance Requirements
 - (4) Standard Term and Condition A.9., Reporting Requirements
 - (5) Standard Term and Condition A.10., Applicability
 - (6) Standard Term and Condition A.11.b) through A.11.e), Construction of New Source(s) and Authorization to Install
 - (7) Standard Term and Condition A.14., Public Disclosure
 - (8) Standard Term and Condition A.15., Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations
 - (9) Standard Term and Condition A.16., Fees
 - (10) Standard Term and Condition A.17., Permit Transfers

2. Severability Clause

- a) 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.
- b) All terms and conditions designated in parts B and C of this permit are federally enforceable as a practical matter, if they 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 and the State and by citizens (to the extent allowed by section 304 of the Act) under the Act. Terms and conditions in parts B and C of this permit shall not be federally enforceable and shall be enforceable under State law only, only if specifically identified in this permit as such.

3. 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 re-issuance, or modification.

- 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, 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 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.

4. Monitoring and Related Record Keeping and Reporting Requirements

- a) Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
 - (1) The date, place (as defined in the permit), and time of sampling or measurements.
 - (2) The date(s) analyses were performed.
 - (3) The company or entity that performed the analyses.
 - (4) The analytical techniques or methods used.
 - (5) The results of such analyses.
 - (6) The operating conditions existing at the time of sampling or measurement.
- b) Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.
- c) Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:
 - (1) Reports of any required monitoring and/or recordkeeping of federally enforceable information shall be submitted to the Akron Regional Air Quality Management District.

- (2) 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 made to the Akron Regional Air Quality Management District. The written reports shall be submitted (i.e., postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. See A.15. below if no deviations occurred during the quarter.
 - (3) Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements contained in this permit shall be submitted (i.e., postmarked) to the Akron Regional Air Quality Management District every six months, by January 31 and July 31 of each year for the previous six calendar months. 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.
 - (4) This permit is for an emissions unit located at a Title V facility. 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.
- d) The permittee shall report actual emissions pursuant to OAC Chapter 3745-78 for the purpose of collecting Air Pollution Control Fees.

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, i.e., upset, of any emissions units or any associated air pollution control system(s) shall be reported to the Akron Regional Air Quality Management District 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 shall be submitted pursuant to 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 emission unit(s) that is (are) served by such control system(s).

6. Compliance Requirements

- a) The emissions unit(s) identified in this Permit shall remain in full compliance with all applicable State laws and regulations and the terms and conditions of this permit.
- b) Any document (including reports) required to be submitted and required by a federally applicable requirement in this permit shall include a certification by a responsible official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.
- c) Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:

- (1) At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.
 - (2) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with ORC section 3704.08.
 - (3) Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
 - (4) As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.
- d) The permittee shall submit progress reports to the Akron Regional Air Quality Management District concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:
- (1) Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
 - (2) An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

7. Best Available Technology

As specified in OAC Rule 3745-31-05, new sources that must employ Best Available Technology (BAT) shall comply with the Applicable Emission Limitations/Control Measures identified as BAT for each subject emissions unit.

8. 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.

9. Reporting Requirements

The permittee shall submit required reports in the following manner:

- a) Reports of any required monitoring and/or recordkeeping of state-only enforceable information shall be submitted to the Akron Regional Air Quality Management District.

- 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 state-only required 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 Akron Regional Air Quality Management District. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted (i.e., postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

10. Applicability

This Permit-to-Install is applicable only to the emissions unit(s) identified in the Permit-to-Install. Separate application must be made to the Director for the installation or modification of any other emissions unit(s).

11. Construction of New Sources(s) and Authorization to Install

- a) This permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. This permit does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the application and terms and conditions of this permit. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of OAC rule 3745-31-02. Furthermore, issuance of this permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Issuance of this permit is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities cannot meet the requirements of this permit or cannot meet applicable standards.
- b) If applicable, authorization to install any new emissions unit included in this permit shall terminate within eighteen months of the effective date of the permit if the owner or operator has not undertaken a continuing program of installation or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.

- c) The permittee may notify Ohio EPA of any emissions unit that is permanently shut down (i.e., the emissions unit has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31) by submitting a certification from the authorized official that identifies the date on which the emissions unit was permanently shut down. Authorization to operate the affected emissions unit shall cease upon the date certified by the authorized official that the emissions unit was permanently shut down. At a minimum, notification of permanent shut down shall be made or confirmed by marking the affected emissions unit(s) as "permanently shut down" in Ohio EPA's "Air Services" along with the date the emissions unit(s) was permanently removed and/or disabled. Submitting the facility profile update will constitute notifying of the permanent shutdown of the affected emissions unit(s).
- d) The provisions of this permit shall cease to be enforceable for each affected emissions unit after the date on which an emissions unit is permanently shut down (i.e., emissions unit has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31). All records relating to any permanently shutdown emissions unit, generated while the emissions unit was in operation, must be maintained in accordance with law. All reports required by this permit must be submitted for any period an affected emissions unit operated prior to permanent shut down. At a minimum, the permit requirements must be evaluated as part of the reporting requirements identified in this permit covering the last period the emissions unit operated.

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

- e) The permittee shall comply with any residual requirements related to this permit, such as the requirement to submit a deviation report, air fee emission report, or other any reporting required by this permit for the period the operating provisions of this permit were enforceable, or as required by regulation or law. All reports shall be submitted in a form and manner prescribed by the Director. All records relating to this permit must be maintained in accordance with law.

12. Permit-To-Operate Application

The permittee is required to apply for a Title V permit pursuant to OAC Chapter 3745-77. The permittee shall submit a complete Title V permit application or a complete Title V permit modification application within twelve (12) months after commencing operation of the emissions units covered by this permit. However, if the proposed new or modified source(s) would be prohibited by the terms and conditions of an existing Title V permit, a Title V permit modification must be obtained before the operation of such new or modified source(s) pursuant to OAC rule 3745-77-04(D) and OAC rule 3745-77-08(C)(3)(d).

13. Construction Compliance Certification

The applicant shall identify the following dates in the online facility profile for each new emissions unit identified in this permit.

- a) Completion of initial installation date shall be entered upon completion of construction and prior to start-up.



- b) Commence operation after installation or latest modification date shall be entered within 90 days after commencing operation of the applicable emissions unit.

14. Public Disclosure

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

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

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., postmarked), by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

16. Fees

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78. The permittee shall pay all applicable permit-to-install fees within 30 days after the issuance of any permit-to-install. The permittee shall pay all applicable permit-to-operate fees within thirty days of the issuance of the invoice.

17. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The new owner must update and submit the ownership information via the "Owner/Contact Change" functionality in Air Services once the transfer is legally completed. The change must be submitted through Air Services within thirty days of the ownership transfer date.

18. 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.

19. 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.

B. Facility-Wide Terms and Conditions

1. All the following facility-wide terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:
 - a) None.

C. Emissions Unit Terms and Conditions



1. P913, MSA System #1

Operations, Property and/or Equipment Description:

MSA System #1 - Modified sealant asphalt process on the laminate (3-wide) roofing line consisting of the MSA Melt Tank, MSA Use Tank, and MSA Applicator Pan that are each controlled by the MSA fiber bed filter.

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	Visible particulate emissions (PE) from any stack shall not exceed 1% opacity, as a 6-minute average. PE shall not exceed 3.48 pounds per day, and 0.54 tons per year. Volatile organic compound (VOC) emissions shall not exceed 48.14 pounds per day, and 8.71 tons per year. Carbon monoxide (CO) emissions shall not exceed 14.79 pounds per day, and 2.68 tons per year.
b.	OAC rule 374517-07(A)	The emission limitation based on this rule is less stringent than the limit established pursuant to OAC rule 3745-31-05(A)(3).
c.	OAC rule 3745-17-07(B)	Visible PE of fugitive dust shall not exceed 20% opacity, as a 3-minute average.
d.	OAC rule 3745-17-08	Vent emissions from MSA tanks to fiber bed filter.
e.	OAC rule 3745-17-11	The emission limitation based on this rule is less stringent than the limit established pursuant to OAC rule 3745-31-05(A)(3).
f.	40 CFR Part 63, Subpart LLLLLL	Total PE from the coater, filler mixer, and sealant applicator are limited to 0.04



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		kg/Mg (0.08 lb/ton) of asphalt shingle or mineral-surfaced roll roofing.

- (2) Additional Terms and Conditions
 - a. None.
- c) Operational Restrictions
 - (1) The permittee shall maintain the 3-hour average inlet gas temperature at or below the operating limit established during the performance test.
 - (2) The permittee shall maintain the 3-hour average pressure drop across the fiber bed filter at or below the operating limit established during the performance test.
- d) Monitoring and/or Recordkeeping Requirements
 - (1) The permittee shall perform weekly checks when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions of fugitive dust from the use bin and visible particulate emissions from the stacks serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the location and color of the emission;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emissions incident; and
 - e. any corrective actions taken to eliminate the visible emissions.
 - (2) The permittee shall maintain the following information, on a monthly basis:
 - a. the company identification of the material stored in each tank;
 - b. the number of squares coated per month;
 - c. the amount of sealant applied per month; in pounds;
 - d. the total MSA (calculated by multiplying the pounds of sealant applied to each square times the number of squares coated per month), in pounds;
 - e. the results of the monthly LEL reading for each tank;
 - f. the estimate of the vent flow, in cfm;

- g. the number of hours the emissions unit was in operation; and
 - h. the VOC and OC mass emissions rates for the entire process, in lbs/day, calculated in accordance with section f)(1)c and f)(1)d.
- (3) The permittee shall maintain records of the inlet gas temperature and pressure drop data along with the 3-hour averages of the inlet gas temperature and pressure drop.
- (4) The permittee must install, operate, and maintain each continuous parameter monitoring system (CPMS) according to the following:
- a. the CPMS must complete a minimum of one cycle of operation for each successive 15-minute period;
 - b. to determine the 3-hour average, the permittee must:
 - i. have a minimum of four successive cycles of operation to have a valid hour of data;
 - ii. have valid data from at least four equally spaced data values for that hour from a CPMS that is not out-of-control according to the permittee's site-specific monitoring plan; and
 - iii. determine the 3-hour average of all recorded readings for each operating day, except as stated in section 63.8690(c) (the permittee must have at least two of the three hourly averages for that period using only hourly average values that are based on valid data(i.e., not from out-of-control periods)); and
 - c. the permittee must record the results of each inspection, calibration, and validation check.
- (5) For each temperature monitoring device, the permittee must meet the requirements of section d)(4) and the following:
- a. locate the temperature sensor in a position that provides a representative temperature;
 - b. for a noncryogenic temperature range, use a temperature sensor with a minimum measurement sensitivity of 2.8 degrees C or 1.0 percent of the temperature value, whichever is larger;
 - c. if a chart recorder is used, it must have a sensitivity in the minor division of at least 20 degrees F;
 - d. perform an accuracy check at least semiannually or following an operating parameter deviation;
 - i. according to the procedures in the manufacturer's documentation; or
 - ii. by comparing the sensor output to redundant sensor output; or

- iii. by comparing the sensor output to the output from a calibrated temperature measurement device; or
 - iv. by comparing the sensor output to the output from a temperature simulator; and
 - e. conduct accuracy checks any time the sensor exceeds the manufacturer's specified maximum operating temperature range or install a new temperature sensor; and
 - f. at least quarterly or following an operating parameter deviation, perform visual inspections of components if redundant sensors are not used.
- (6) For each pressure measurement device, the permittee must meet the requirements of section d)(4) and the following:
- a. locate the pressure sensor(s) in, or as close as possible to, a position that provides a representative measurement of the pressure;
 - b. use a gauge with a minimum measurement sensitivity of 0.12 kiloPascals or a transducer with a minimum measurement sensitivity of 5 percent of the pressure range;
 - c. check pressure tap pluggage daily, and perform an accuracy check at least quarterly or following an operating parameter deviation:
 - i. according to the procedures in the manufacturer's documentation; or
 - ii. by comparing the sensor to redundant sensor output;
 - d. conduct calibration checks any time the sensor exceeds the manufacturer's specified maximum operating pressure range or install a new sensor;
 - e. at least monthly or following an operating parameter deviation, perform a leak check of all components for integrity, all electrical connections for continuity, and all mechanical connections for leakage; and
 - f. at least quarterly or following an operating parameter deviation, perform visible inspections on all components if redundant sensors are not used.
- (7) For monitoring parameters other than temperature and pressure drop, the permittee must install and operate a CPMS to provide representative measurements of the monitored parameters.
- (8) As an option to installing the CPMS specified in section d)(4), the permittee may install a continuous emissions monitoring system (CEMS) or a continuous opacity monitoring system (COMS) that meets the requirements specified in 40 CFR 63.8 and the applicable performance specifications of 40 CFR Part 60, Appendix B.
- (9) For each monitoring system, the permittee must develop and make available for inspection by the permitting authority, upon request, a site-specific monitoring plan that addresses the following:

- a. installation of the CPMS, CEMS, or COMS sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (i.e., on or downstream of the last control device);
 - b. performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction system; and
 - c. performance evaluation procedures and acceptance criteria (i.e., calibrations).
- (10) The site-specific monitoring plan must also address the following:
- a. ongoing operation and maintenance procedures in accordance with general requirements of sections 40 CFR 63.8(c)(1), (c)(3), (c)(4)(ii), (c)(7), and (c)(8);
 - b. ongoing data quality assurance procedures in accordance with the general requirements of section 40 CFR 63.8(d); and
 - c. ongoing record keeping and reporting procedures in accordance with the general requirements of sections 40 CFR 63.10(c), (e)(1), and (e)(2)(i).
- (11) The permittee must conduct a performance evaluation of each CPMS, CEMS, or COMS in accordance with the site-specific monitoring plan.
- (12) The permittee must operate and maintain the CPMS, CEMS, or COMS in continuous operation according to the site-specific monitoring plan.
- e) Reporting Requirements
- (1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.
 - (2) The permittee shall submit quarterly deviation (excursion) reports that identify the following:
 - a. all periods of time during which the pressure drop across the fiber bed filter did not comply with the allowable range;
 - b. all periods of time during which the inlet gas temperature did not comply with the allowable range;
 - c. an identification of each day during which the daily VOC emissions exceeded 48.14 pounds per day, and the actual VOC emissions for each such day; and
 - d. an identification of each day during which the daily CO emissions exceeded 14.79 pounds per day, and the actual CO emissions for each such day; and

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

- (3) The permittee shall submit semiannual written reports that (a) identify all days during which any visible emissions were observed from the stack service this emissions unit or any visible emissions of fugitive dust were observed and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the Akron RAQMD) by January 31 and July 31 of each year and shall cover the previous 6-month period.
 - (4) The permittee shall submit compliance reports that contain the information required by 40 CFR 63.8693(c). The reports shall cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31. The compliance reports must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.
 - (5) The permittee shall submit with the results of each performance test, documentation of the determined pressure drop range, in inches of water, for the fiber bed filter, and the inlet gas temperature range, in degrees Fahrenheit.
- f) Testing Requirements
- (1) Compliance with the emission limitations in section b)(1) of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emission Limitation:

PE from any stack shall not exceed 1% opacity as a 6-minute average.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with the visible PE limitation in accordance with Method 9 of 40 CFR Part 60, Appendix A.
 - b. Emission Limitation:

PE shall not exceed 3.48 pounds per day, and 0.54 tons per year.

Applicable Compliance Method:

Compliance with the daily limitation shall be based upon the results of stack testing in accordance with Method 1 - 5, of 40 CFR Part 60, Appendix A as required in section f)(2).

The annual limitation was developed by multiplying the daily mass emission limitations for the tanks by 365 days per year, and multiplying the MSA Applicator Pan particulate emission factor (0.162 lb/ton shingle production) by the maximum allowable shingle production rate (492,080.4 tpy), and then dividing by 2000. Therefore, compliance with the annual limitation shall be ensured if compliance with the daily limitation is maintained.
 - c. Emission Limitation:

VOC emissions shall not exceed 48.14 pounds per day, and 8.71 tons per year.

Applicable Compliance Method:

Daily VOC emissions shall be calculated in accordance with the following methodology:

VOC emissions (lb/day) = MSA Melt Tank + MSA Use + MSA Applicator Pan

MSA Melt Tank and Use Tank VOC emissions are calculated using the following methodology:

VOC conc. (lb/cf) = %LEL * (1 - %THC) * (LEL conc.) * (28.32 L/cf) * (lb/454,000 mg)

VOC emissions (lb/day) = VOC Concentration (lb/cf) * Flow (scfm) * (60 min/hr) * (24 hr/day)

Where:

%LEL = Lower Explosive Limit value, measured monthly by an instrument at each tank;

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

LEL conc. = 45 mg/L, value of the Lower Explosive Limit (100% LEL) expressed in a concentration that is constant for alkanes, (Industrial Explosive Prevention and Protection, Frank T. Bodurtha, pg 12, McGraw Hill, 1980); and

Flow = Estimate of vent flow, cfm.

MSA Applicator Pan VOC emissions are calculated using the following methodology:

VOC emissions (lb/day) = THC EF (lb/ton asphalt as coater) * Maximum Hourly Asphalt Throughput at Coater (tph) * (24 hr/day)

Where:

THC EF = 0.00431 lb/ton asphalt at coater (ARMA emission factor).

The annual limitation was developed by multiplying the daily mass emission limitations for the tanks by 365 days per year, and multiplying the MSA Applicator Pan THC emission factor by the maximum allowable asphalt usage rate (96,911.2 tpy), and then dividing by 2000. Therefore, compliance with the annual limitation shall be ensured if compliance with the daily limitation is maintained.

d. Emission Limitation:

CO emissions shall not exceed 14.79 pounds per day, and 2.68 tons per year.

Applicable Compliance Method:

Daily CO emissions shall be calculated in accordance with the following methodology:

CO emissions (lb/day) = MSA Melt Tank + MSA Use + MSA Applicator Pan

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

$$\text{CO (lbs/day)} = \text{EF} * \text{LEL conc.} * 0.028 \text{ m}^3/\text{cf} * \text{Flow} * (\text{g}/1000 \text{ mg}) * (\text{lb}/453.59 \text{ g}) * 960 \text{ min}/\text{hr} * (24 \text{ hr}/\text{day})$$

Where:

EF = 1.14 mg/m³/ppm emission factor from AP-42 for CO;

LEL conc. = correlation of the concentration of CO based on the LEL of asphalt;

= 31 * %LEL + 570 for roofing asphalt; and

Flow = estimate of vent flow, cfm.

MSA Applicator Pan CO emissions are calculated as follows:

$$\text{CO emissions (lb/day)} = \text{CO EF (lb/ton asphalt at coater)} * (\text{Maximum Hourly Asphalt Throughput at Coater (tph)} * (24 \text{ hr}/\text{day}))$$

Where:

CO EF = 0.000904 lb/ton asphalt at coater (ARMA emission factor).

The annual limitation was developed by multiplying the daily mass emission limitations for the tanks by 365 days per year, and multiplying the MSA Applicator Pan CO emission factor by the maximum allowable asphalt usage rate (96,911.2 tpy) and then dividing by 2000. Therefore, compliance with the annual limitation shall be ensured if compliance with the daily limitation is maintained.

e. Emission Limitation:

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

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with the visible PE limitation in accordance with Method 9 of 40 CFR Part 60, Appendix A.

f. Emission Limitation:

Total PE from the coater, filler mixer, and sealant applicator are limited to 0.04 kg/Mg (0.08 lb/ton) of asphalt shingle or mineral-surfaced roll roofing.

Applicable Compliance Method:

Particulate mass emission rate shall be calculated in accordance with the following methodology:

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

Where:

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

Mpm = Particulate mass emission rate, kilograms per hour, determined using Eq. 2, and

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

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

C = Concentration of particulate on a dry basis, gram per dry standard cubic meter (g/dscm), as measured by the test method specified in Table 3 of 40 CFR 63 Part LLLLL; and

Q = Vent gas stream flow rate (dry standard cubic meters per minute) at a temperature of 20 degrees C as measured by the test method specified in Table 3 of 40 CFR 63 Part LLLLL; and

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

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

- a. The emission testing shall be conducted no later than 180 days after the compliance date for Subpart LLLLL.
- b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for particulates.
- c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

For particulates, Methods 1 through 5 of 40 CFR Part 60, Appendix A.

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

- d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.
 - e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).
 - f. Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.
 - g. A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.
- g) Miscellaneous Requirements
- (1) None.