



State of Ohio Environmental Protection Agency

**RE: FINAL PERMIT TO INSTALL
MEDINA COUNTY**

CERTIFIED MAIL

Street Address:

50 West Town Street, Suite 700

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

Mailing Address:

Lazarus Gov. Center
P.O. Box 1049

Application No: 16-02464

Fac ID: 1652050040

DATE: 2/8/2007

Owens Corning Medina Roofing Plant
Brian Thomas
890 W Smith Rd
Medina, OH 44256

Enclosed please find an Ohio EPA Permit to Install which will allow you to install the described source(s) in a manner indicated in the permit. Because this permit contains several conditions and restrictions, I urge you to read it carefully.

The Ohio EPA is urging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Pollution Prevention at (614) 644-3469.

You are hereby notified that this action of the Director is final 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 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

Sincerely,

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

CC: USEPA

ARAQMD



**Permit To Install
Terms and Conditions**

**Issue Date: 2/8/2007
Effective Date: 2/8/2007**

FINAL PERMIT TO INSTALL 16-02464

Application Number: 16-02464
Facility ID: 1652050040
Permit Fee: **\$2250**
Name of Facility: Owens Corning Medina Roofing Plant
Person to Contact: Brian Thomas
Address: 890 W Smith Rd
Medina, OH 44256

Location of proposed air contaminant source(s) [emissions unit(s)]:
**890 W Smith Rd
Medina, Ohio**

Description of proposed emissions unit(s):
Modification to Emissions Unit P912, Replacemnt Equipment for P906 and P908.

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Chris Korleski
Director

Part I - GENERAL TERMS AND CONDITIONS

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

1. Monitoring and Related Recordkeeping and Reporting Requirements

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

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the appropriate Ohio EPA District Office or local air agency. 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 B.9 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 (i.e., postmarked) to the appropriate Ohio EPA District Office or local air agency 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.
 - iv. If this permit is for an emissions unit located at a Title V facility, then 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.

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 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).

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 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.

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7. Fees

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

8. Federal and State Enforceability

Only those terms and conditions designated in this permit as federally enforceable, that are required under the Act, or any 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. All other terms and conditions of this permit shall not be federally enforceable and shall be enforceable under State law only.

9. Compliance Requirements

- a. Any document (including reports) required to be submitted and required by a federally applicable requirement in this permit shall include a certification by a responsible official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.
- b. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:
 - i. At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.
 - ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with ORC section 3704.08.
 - iii. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.

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- 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.

10. Permit-To-Operate Application

- a. If 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).
- b. If the permittee is required to apply for permit(s) pursuant to OAC Chapter 3745-35, the source(s) identified in this permit is (are) permitted to operate for a period of up to one year from the date the source(s) commenced operation. Permission to operate is granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws, regulations, and policies. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within ninety (90) days after commencing operation of the source(s) covered by this permit.

11. Best Available Technology

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

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12. 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.

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13. Permit-To-Install

A permit-to-install must be obtained pursuant to OAC Chapter 3745-31 prior to "installation" of "any air contaminant source" as defined in OAC rule 3745-31-01, or "modification", as defined in OAC rule 3745-31-01, of any emissions unit included in this permit.

B. State Only Enforceable Permit-To-Install General Terms and Conditions

1. Compliance Requirements

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.

2. 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 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 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 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 (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.)

3. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permit holder.

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The appropriate Ohio EPA District Office or local air agency must be notified in writing of any transfer of this permit.

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4. Authorization To Install or Modify

If applicable, authorization to install or modify any new or existing 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 modification or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation or modification. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.

5. Construction of New Sources(s)

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.

6. 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.

7. 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).

8. Construction Compliance Certification

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

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

C. Permit-To-Install Summary of Allowable Emissions

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

<u>Pollutant</u>	<u>Tons Per Year</u>
PE/PM-10	22.79
CO	51.77
VOC	55.69

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Part II - FACILITY SPECIFIC TERMS AND CONDITIONS

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

1. The permittee's existing emissions units are subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Asphalt Processing and Asphalt Roofing Manufacturing, 40 CFR Part 63, Subpart LLLLL and, therefore, are subject to all the requirements listed for the emissions units pursuant to 40 CFR Part 63, Subpart LLLLL,

Given the applicability of 40 CFR Part 63, Subpart LLLLL, the permittee must also comply with applicable provisions of 40 CFR Part 63, Subpart A as referenced in Table 7 of 40 CFR Part 63, Subpart LLLLL (see Attachment 1).

2. The permittee is subject to the applicable requirements of 40 CFR Part 63, Subpart JJJJ - National Emission Standards for Hazardous Air Pollutants: Paper and Other Web Coatings. The text of this rule is included in Attachment 2 hereto, and is hereby incorporated into this permit as if fully rewritten.

The following sources are subject to Subpart JJJJ:

P906 - Asphalt Coater/Surge Tank #1; and
P908 - Asphalt Coater/Surge Tank #2.

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

None

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>
	OAC rule 3745-17-07(A) OAC rule 3745-17-11
P906 - Asphalt Coater/Surge Tank #1 controlled with a fiber bed filter (serves 3-Wide roofing line) - modification	OAC rule 3745-31-05(A)(3)
	OAC rule 3745-17-08
	OAC rule 3745-21-07(G)(2)
	OAC rule 3745-31-05(A)(3)
	ORC 3704.3(T)(4)
	40 CFR Part 60, Subpart UU
	OAC rule 3745-31-02(A)
	40 CFR Part 63, Subpart LLLLL

40 CFR Part 63, Subpart
JJJJ

Applicable Emissions Limitations/Control Measures	63, Subpart LLLLLL.
The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07, 3745-17-11, 3745-17-08, 3745-31-05(C), and 40 CFR Part 63, Subpart LLLLLL.	The coater shall be adequately enclosed and vented to a fiber bed filter.
Volatile organic compound (VOC) emissions shall not exceed 4.62 lbs/hr.	Exempt, see A.II.2 below.
Carbon monoxide (CO) emissions shall not exceed 5.51 lbs/hr.	The rolling, 12-month VOC and CO emissions shall not exceed the following:
The hourly emission limitations are based upon the emissions unit's potentials to emit (PTE). Therefore, no hourly records are required to demonstrate compliance with these limitations.	VOC - 14.75 tons/yr CO - 17.59 tons/yr
See A.2.b below.	See section A.II.1 below.
See A.2.c below.	Exempt due to 40 CFR Part 63, Subpart LLLLLL applicability.
The visible/mass emission limitations specified by these rules are equivalent to or less stringent than the visible/emission limitations established pursuant to OAC rule 3745-31-05(A)(3) or 40 CFR Part	The total particulate emissions (PE) from the coater, coating mixer, sealant applicator, and adhesive applicator on the 3-wide roofing line shall not exceed 0.04 kilogram per megagram (kg/Mg) [0.08 pound per ton, lb/ton] of asphalt shingle or mineral-surfaced roll roofing produced.
	Visible emissions from the exhaust gases shall not exceed 20 percent opacity,
	Visible emissions from the emissions capture system shall not exceed 20 percent for any period of consecutive valid observations totaling 60 minutes.

See Sections A.III.3
through 12 and A.IV.7.

See Attachment 1.

See Attachment 2.

2. Additional Terms and Conditions

- 2.a** Based upon information submitted by the applicant in their permit application, the annual actual baseline emissions for P906, P908, and P912 are as follows:

PM-10 - 18.54 tpy;
VOC - 25.3 tpy;
CO -30.58 tpy;
SO₂ - 0.92 tpy; and
H₂S - 1.89 tpy.

- 2.b** The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the sulfur dioxide and, hydrogen sulfide from this air contaminant source since the uncontrolled potential to emit for sulfur dioxide and hydrogen sulfide is less than ten tons per year.

The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the PE/PM-10 from this air contaminant source since the potential to emit, taking into account air pollution controls, for PE/PM-10 is less than ten tons per year.

- 2.c** Permit to Install 16-02464 for this air contaminant source takes into account the following voluntary restrictions as proposed by the permittee for the purpose of avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) for particulate emissions:
- a.. fiber bed filter; and
 - b. throughput and production limitation as stated in section II.1 below.

II. Operational Restrictions

1. The maximum throughput and production on the laminated (3-wide) roofing line shall

Emissions Unit ID: P906

not exceed 96,911.2 tons of asphalt throughput and 492,080.4 tons of shingle production, based on rolling, 12-month summations. The permittee has existing operation records and, therefore, does not need to be limited to the first year monthly throughput and production amounts.

2. The permittee shall only employ asphalt in this emissions unit which is not a photochemically reactive material, as defined in OAC rule 3745-21-01(C)(5).

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain monthly records of the following information for this emissions unit:
 - a. the asphalt throughput and shingle production rates, in tons, for each month; and
 - b. the rolling, 12-month asphalt throughput and shingle production rates, in tons.
2. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible emissions of fugitive dust and visible emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed the permittee shall also note the following in the operations log:
 - a. the location and color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to eliminate the visible emissions.
3. The permittee shall maintain records of the inlet gas temperature and pressure drop data along with the 3-hour averages of both the inlet gas temperature and pressure drop (see sections A.III.4, A.III.5, and A.III.6).
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 three of 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 in section A.III.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;
 - e. conduct accuracy checks any time the sensor exceeds the manufacturer's specified maximum operating temperature range or install a new temperature sensor; and

Emissions Unit ID: P906

- 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 A.III.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. 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 output 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 pressure 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.
 - 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 A.III.4, the permittee may install a continuous emissions monitoring system (CEMS) or a continuous opacity monitoring system (COMS) that meets the requirements specified in section 63.8 and the applicable performance specifications of 40 CFR Part 60, Appendix B.
9. For each monitoring system required in this section, 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 (e.g., 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 (e.g., calibrations).
10. The site-specific monitoring plan must also address the following:
- a. ongoing operation and maintenance procedures in accordance with the general requirements of sections 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 63.8(d);
 - c. ongoing record keeping and reporting procedures in accordance with the general requirements of sections 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.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (exceedance) reports that identify the following information concerning the operation of the control equipment during the operation of this emissions unit:
 - a. each period of time when the pressure drop across the fiber bed filter was outside the acceptable range;
 - b. an identification of each incident of deviation described in (a) where a prompt investigation was not conducted;
 - c. an identification of each incident of deviation described in (a) where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and
 - d. an identification of each incident of deviation described in (a) where proper records were not maintained for the investigation and/or the corrective action.

These quarterly reports shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

2. The permittee shall submit quarterly deviation (exceedance) reports that identify all exceedances of the rolling, 12-month asphalt throughput and shingle production limitations of 96,911.2 and 492,080.4 tons, respectively.
3. The quarterly deviation reports shall be due by the dates specified in Part 1 - General Terms and Conditions of this permit under section (A)(1).
4. The permittee shall also submit annual reports that specify the total PE/PM-10, CO, and VOC emissions from this emissions unit for the previous calendar year. These reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data for this emissions unit in the annual Fee Emissions Report.
5. The permittee shall submit, with the initial stack test report, documentation of the determined normal pressure drop range, in inches of water, for the fiber bed filter.
6. The permittee shall submit semiannual written reports that (a) identify all days during which any visible emissions were observed from the stack serving this emissions unit or any visible emissions of fugitive dust were observed and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the Akron RAQMD) by January 31 and July 31 of each year and shall cover the previous 6-month period and shall include copies of all Method 9 readings that were performed.
7. 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.

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:

- a. Emission Limitations:

Visible emissions from the exhaust gases shall not 20 percent opacity.

Applicable Compliance Method:

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

b. Emission Limitation:

Visible emissions from the emissions capture system shall not exceed 20 percent opacity for any period of consecutive valid observations totaling 60 minutes.

Applicable Compliance Method:

Compliance 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, 2002.

c. Emission Limitations:

5.51 lbs/hr of CO

17.59 tons per year of CO based upon a rolling, 12-month summation of the monthly emissions.

Applicable Compliance Methods:

Compliance with the lbs/hr emission limitation shall be demonstrated based upon the test results of emission testing conducted in accordance with the methods and procedures specified in section A.V.2 of this permit.

Compliance with the tons per year limitation shall be ensured as long as compliance with the lbs/hr limitation and the annual throughput/production limitations is maintained.

d. Emission Limitations:

4.62 lbs/hr of VOC

14.75 tons per year of VOC based upon a rolling, 12-month summation of the monthly emissions.

Applicable Compliance Methods:

Compliance with the lbs/hr emission limitation shall be demonstrated based upon the test results of emission testing conducted in accordance with the methods and procedures specified in section A.V.2 of this permit.

Compliance with the tons per year limitation shall be ensured as long as compliance with the lbs/hr limitation and the annual throughput/production limitations is maintained.

e. Emission Limitations:

Total PE from the coater, coating mixer, sealant applicator, and adhesive applicator on the 3-wide roofing line to 0.04 kilogram per megagram (kg/Mg) (0.08 pound per ton, lb/ton) of asphalt shingle or mineral-surfaced roll roofing produced.

Applicable Compliance Methods:

Compliance with the PE limitation above shall be determined as follows:

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

where:

E = PE rate, in kilograms of PE per megagram of roofing product manufactured;
 Mpm = PE rate, in kilograms per hour, determined using Equation 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.

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

where:

Mpm = PE rate, in kilograms per hour;

C = concentration of particulate matter on a dry basis, grams per dry standard cubic meter (g/dscm), as measured by the test method specified in Table 3 to this subpart;

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 to this subpart; and

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

2. The permittee shall conduct, or have conducted, emission testing in accordance with

the following requirements:

- a. The emission testing shall be conducted within 180 days after issuance of this permit.
 - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate(s) for PE, PM-10, CO, opacity and VOC.
- iii. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):
- i. for PE, Methods 1 thru 5 of 40 CFR Part 60, Appendix A;
 - ii. for PM-10, Methods 1 thru 4 of 40 CFR Part 60, Appendix A and 201 of 40 CFR Part 51, Appendix M;
 - iii. for CO, Methods 1 thru 4 and 10 or 10B of 40 CFR Part 60, Appendix A; and
 - iv. for VOC, Methods 1 thru 4 and 18 or 25/25A of 40 CFR Part 60, Appendix A; and
 - v. for opacity, Method 9 of 40 CFR Part 60, Appendix A.
- Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.
- d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Akron RAQMD.
3. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Akron RAQMD. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Akron RAQMD's refusal to accept the results of the emission test(s).

Personnel from the Akron RAQMD shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

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

VI. Miscellaneous Requirements

1. The terms and conditions in this Permit to Install shall supersede all the air pollution control requirements for this emissions unit contained in permit to install 16-02347 as issued final modification on September 15, 2005.

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P906 - Asphalt Coater/Surge Tank #1 controlled with a fiber bed filter (serves 3-Wide roofing line) - modification	None	None

2. Additional Terms and Conditions

- 2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>
P908 - Asphalt Coater/Surge Tank #2 controlled with a fiber bed filter (serves 4-Wide roofing line) - Modification	OAC rule 3745-31-05(A)(3) ORC 3704.3(T)(4) OAC rule 3745-17-07(A) OAC rule 3745-17-11(B) OAC rule 3745-17-08 OAC rule 3745-21-07(G)(2) OAC rule 3745-31-05(A)(3)

40 CFR Part 60, Subpart UU	Applicable Emissions <u>Limitations/Control Measures</u>	rules are equivalent to or less stringent than the visible/emission limitations established pursuant to
40 CFR Part 63, Subpart LLLLLL	<p>The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07, 3745-17-11, 3745-17-08, 3745-31-05(C), and 40 CFR Part 63, Subpart LLLLLL.</p> <p>Particulate emissions (PE) and particulate matter with aerodynamic diameter less than ten microns in diameter (PM-10) shall not exceed 3.71 lbs/hr.</p> <p>Volatile organic compound (VOC) emissions shall not exceed 6.59 lbs/hr.</p> <p>Carbon monoxide (CO) emissions shall not exceed 7.86 lbs/hr.</p>	<p>OAC rule 3745-31-05(A)(3) or 40 CFR Part 63, Subpart LLLLLL..</p> <p>The coater shall be adequately enclosed and vented to a fiber bed filter.</p> <p>Exempt, see A.II.2 below.</p> <p>The rolling, 12-month VOC, CO, and PE/PM-10 emissions shall not exceed the following:</p> <p>VOC - 25.16 tpy CO - 30.01 tpy PE/PM-10 - 14.15 tpy</p> <p>See section A.II.1 below.</p>
40 CFR Part 63, Subpart JJJJ	<p>The hourly emission limitations are based upon the emissions unit's potentials to emit (PTE). Therefore, no hourly records are required to demonstrate compliance with these limitations.</p> <p>See A.2.b below.</p> <p>The visible/mass emission limitations specified by these</p>	<p>Exempt, due to 40 CFR Part 63, Subpart LLLLLL applicability.</p> <p>The total particulate emissions (PE) from the coater, coating mixer, sealant applicator, and adhesive applicator on the 3-wide roofing line shall not exceed 0.04 kilogram per megagram (kg/Mg) [0.08 pound per ton, lb/ton] of asphalt shingle or mineral-surfaced roll roofing produced.</p> <p>Visible emissions from the exhaust gases shall not exceed 20 percent opacity,</p>

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Visible emissions from the emissions capture system shall not exceed 20 percent for any period of consecutive valid observations totaling 60 minutes.

See Sections A.III.3 through 12 and A.IV.7.

See Attachment 2.

2. Additional Terms and Conditions

2.a Based upon information submitted by the applicant in their permit application, the annual actual baseline emissions for P906, P908, and P912 are as follows:

PM-10 - 18.54 tpy;
VOC - 25.3 tpy;
CO -30.58 tpy;
SO₂ - 0.92 tpy; and
H₂S - 1.89 tpy.

2.b The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the sulfur dioxide or hydrogen sulfide from this air contaminant source since the uncontrolled potential to emit for sulfur dioxide and hydrogen sulfide is less than ten tons per year.

II. Operational Restrictions

1. The maximum throughput and production on the laminated (3-wide) roofing line shall not exceed 165,325.1 tons of asphalt throughput and 797,115.0 tons of shingle production, based on rolling, 12-month summations. The permittee has existing operation records and, therefore, does not need to be limited to the first year monthly throughput and production amounts.
2. The permittee shall only employ asphalt in this emissions unit which is not a photochemically reactive material, as defined in OAC rule 3745-21-01(C)(5).

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain monthly records of the following information for this emissions unit:
 - a. the asphalt throughput and shingle production rates, in tons, for each month; and
 - b. the rolling, 12-month asphalt throughput and shingle production rates, in tons.
2. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible emissions of fugitive dust and visible emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed the permittee shall also note the following in the operations log:
 - a. the location and color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to eliminate the visible emissions.
3. The permittee shall maintain records of the inlet gas temperature and pressure drop data along with the 3-hour averages of both the inlet gas temperature and pressure drop (see sections A.III.4, A.III.5, and A.III.6).
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 three of 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 in section A.III.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;
 - 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 A.III.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.

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- 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. 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 output 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 pressure 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.
 - 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 A.III.4, the permittee may install a continuous emissions monitoring system (CEMS) or a continuous opacity monitoring system (COMS) that meets the requirements specified in section 63.8 and the applicable performance specifications of 40 CFR Part 60, Appendix B.
9. For each monitoring system required in this section, 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 (e.g., 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 (e.g., calibrations).

10. The site-specific monitoring plan must also address the following:
 - a. ongoing operation and maintenance procedures in accordance with the general requirements of sections 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 63.8(d);
 - c. ongoing record keeping and reporting procedures in accordance with the general requirements of sections 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.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (exceedance) reports that identify the following information concerning the operation of the control equipment during the operation of this emissions unit:
 - a. each period of time when the pressure drop across the fiber bed filter was outside the acceptable range;
 - b. an identification of each incident of deviation described in (a) where a prompt investigation was not conducted;
 - c. an identification of each incident of deviation described in (a) where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and
 - d. an identification of each incident of deviation described in (a) where proper records were not maintained for the investigation and/or the corrective action.

These quarterly reports shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

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2. The permittee shall submit quarterly deviation (exceedance) reports that identify all exceedances of the rolling, 12-month asphalt throughput and shingle production limitations of 165,325.1 and 797,115.0 tons, respectively.
3. The quarterly deviation reports shall be due by the dates specified in Part 1 - General Terms and Conditions of this permit under section (A)(1).
4. The permittee shall also submit annual reports that specify the total PE/PM-10, CO, and VOC emissions from this emissions unit for the previous calendar year. These reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data for this emissions unit in the annual Fee Emissions Report.
5. The permittee shall submit, with the initial stack test report, documentation of the determined normal pressure drop range, in inches of water, for the fiber bed filter.
6. The permittee shall submit semiannual written reports that (a) identify all days during which any visible emissions were observed from the stack serving this emissions unit or any visible emissions of fugitive dust were observed and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the Akron RAQMD) by January 31 and July 31 of each year and shall cover the previous 6-month period and shall include copies of all Method 9 readings that were performed.
7. 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.

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:
 - a. Emission Limitations:

Visible emissions from the exhaust gases shall not 20 percent opacity.

Applicable Compliance Method:

Compliance shall be determined in accordance with Test Method 9, as set forth in "Appendix on Test Methods" in 40 CFR Part 60 ("Standards of Performance

for New Stationary Sources"), as such Appendix existed on July 1, 2002.

b. Emission Limitation:

Visible emissions from the emissions capture system shall not exceed 20 percent opacity for any period of consecutive valid observations totaling 60 minutes.

Applicable Compliance Method:

Compliance 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, 2002.

c. Emission Limitations:

3.17 lbs/hr of PE/PM-10

14.15 tons per year of PE/PM-10 based upon a rolling, 12-month summation

Applicable Compliance Methods:

Compliance with the lbs/hr emission limitation shall be demonstrated based upon the test results of emission testing conducted in accordance with the methods and procedures specified in section A.V.2 of this permit.

Compliance with the tons per year limitation shall be ensured as long as compliance with the lbs/hr limitation and the annual throughput/production limitations is maintained.

d. Emission Limitations:

7.86 lbs/hr of CO

30.01 tons per year of CO based upon a rolling, 12-month summation of the monthly emissions.

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Applicable Compliance Methods:

Compliance with the lbs/hr emission limitation shall be demonstrated based upon the test results of emission testing conducted in accordance with the methods and procedures specified in section A.V.2 of this permit.

Compliance with the tons per year limitation shall be ensured as long as compliance with the lbs/hr limitation and the annual throughput/production limitations is maintained.

e. Emission Limitations:

6.59 lbs/hr of VOC

25.16 tons per year of VOC based upon a rolling, 12-month summation of the monthly emissions.

Applicable Compliance Methods:

Compliance with the lbs/hr emission limitation shall be demonstrated based upon the test results of emission testing conducted in accordance with the methods and procedures specified in section A.V.2 of this permit.

Compliance with the tons per year limitation shall be ensured as long as compliance with the lbs/hr limitation and the annual throughput/production limitations is maintained..

f. Emission Limitations:

Total PE from the coater, coating mixer, sealant applicator, and adhesive applicator on the 3-wide roofing line to 0.04 kilogram per megagram (kg/Mg) (0.08 pound per ton, lb/ton) of asphalt shingle or mineral-surfaced roll roofing produced.

Applicable Compliance Methods:

Compliance with the PE limitation above shall be determined as follows:

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

where:

E = PE rate, in kilograms of PE per megagram of roofing product manufactured;
 Mpm = PE rate, in kilograms per hour, determined using Equation 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.

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

where:

Mpm = PE rate, in kilograms per hour;

C = concentration of particulate matter on a dry basis, grams per dry standard cubic meter (g/dscm), as measured by the test method specified in Table 3 to this subpart;

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 to this subpart; and

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

2. The permittee shall conduct, or have conducted, emission testing in accordance with the following requirements:
 - a. The emission testing shall be conducted within 180 days after issuance of this permit.
 - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate(s) for PE, PM-10, CO, opacity and VOC.
 - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):
 - i. for PE, Methods 1 thru 5 of 40 CFR Part 60, Appendix A;
 - ii. for PM-10, Methods 1 thru 4 of 40 CFR Part 60, Appendix A and 201 of 40 CFR Part 51, Appendix M;
 - iii. for CO, Methods 1 thru 4 and 10 or 10B of 40 CFR Part 60, Appendix A; and
 - iv. for VOC, Methods 1 thru 4 and 18 or 25/25A of 40 CFR Part 60, Appendix A; and
 - v. for opacity, Method 9 of 40 CFR Part 60, Appendix A.

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

- d. The test(s) shall be conducted while the emissions unit is operating at or near its

maximum capacity, unless otherwise specified or approved by the Akron RAQMD.

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

Personnel from the Akron RAQMD shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

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

VI. Miscellaneous Requirements

1. The terms and conditions in this Permit to Install shall supersede all the air pollution control requirements for this emissions unit contained in permit to install 16-02347 as issued final modification on September 15, 2005.

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P908 - Asphalt Coater/Surge Tank #2 controlled with a fiber bed filter (serves 4-Wide roofing line) - Modification	OAC rule 3745-31-05	None

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	
P912 - MLA System controlled with a fiber bed filter and dust collector - MLA melt tank, MLA use tank, MLA filler hopper, MLA mix tank, MLA applicator pan (3-wide roofing line) - modification	OAC rule 3745-31-05(A)(3)	OAC rule 3745-17-08 OAC rule 3745-17-11(B)
	ORC 3704.03(T)(4)	40 CFR Part 63, Subpart LLLLL
	OAC rule 3745-17-07(A) OAC rule 3745-17-07(B)	

OAC
3745-21-07(G)(2)

rule

Applicable Emissions
Limitations/Control Measures

The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07, 3745-17-08, 3745-17-11, and 40 CFR Part 63, Subpart LLLLLL.

Volatile organic compound (VOC) emissions shall not exceed 3.86 lbs/hr.

The hourly limitation is based upon the emissions unit's potential to emit (PTE). Therefore, no hourly records are required to demonstrate compliance with this limitation.

The VOC emissions shall not exceed 15.78 tons per rolling, 12-month period.

See A.2.a.

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

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

Emissions from the MLA system shall be vented to a fiber bed filter and dust collector.

4.94 lbs/hr particulate emissions (based on process weight rate of 1.32 tons/hr and Table I)

The PE from the coater, coating mixer, sealant applicator, and adhesive applicator on the 3-wide roofing line shall not exceed 0.04 kilogram per megagram (kg/Mg) [0.08 pound per ton, lb/ton] of asphalt shingle or mineral-surfaced roll roofing produced.

See sections A.III.3 through A.III.11 and A.IV.4 below.

Exempt, see A.II.2 below.

2. Additional Terms and Conditions

- 2.a** The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the hydrogen sulfide and CO from this air contaminate source since the uncontrolled potential to emit for hydrogen sulfide and CO is less than ten tons per year.

The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the PE/PM-10 from this air contaminant source since the potential to emit, taking into account air pollution controls, for PE/PM-10 is less than ten tons per year

- 2.b** Based upon information submitted by the applicant in their permit application, the annual actual baseline emissions for P906, P908, and P912 are as follows:

PM-10 - 18.54 tpy;
VOC - 25.3 tpy;
CO -30.58 tpy;
SO₂ - 0.92 tpy; and
H₂S - 1.89 tpy.

II. Operational Restrictions

1. The permittee shall only employ asphalt in this emissions unit which is not a photochemically reactive material, as defined in OAC rule 3745-21-01(C)(5).

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit and any visible emissions of fugitive dust. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the location and color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to eliminate the visible emissions.
2. 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.
3. 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 three of 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.

4. For each temperature monitoring device, the permittee must meet the requirements in section A.III.3 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;
 - 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.
5. For each pressure measurement device, the permittee must meet the requirements of section A.III.3 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

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- range;
- c. check pressure tap pluggage daily. 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 output to redundant sensor output; and
 - d. conduct calibration checks any time the sensor exceeds the manufacturer's specified maximum operating pressure range or install a new pressure 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.
6. For monitoring parameters other than temperature and pressure drop, the permittee must install and operate CPMS to provide representative measurements of the monitored parameters.
 7. As an option to installing the CPMS specified in section A.III.3, the permittee may install a continuous emissions monitoring system (CEMS) or a continuous opacity monitoring system (COMS) that meets the requirements specified in section 63.8 and the applicable performance specifications of 40 CFR Part 60, Appendix B.
 8. For each monitoring system required in this section, 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 (e.g., 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 (e.g., calibrations).
 9. The site-specific monitoring plan must also address the following:

- a. ongoing operation and maintenance procedures in accordance with the general requirements of sections 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 63.8(d); and
 - c. ongoing record keeping and reporting procedures in accordance with the general requirements of sections 63.10(c), (e)(1), and (e)(2)(i).
10. The permittee must conduct a performance evaluation of each CPMS, CEMS, or COMS in accordance with the site-specific monitoring plan.
 11. The permittee must operate and maintain the CPMS, CEMS, or COMS in continuous operation according to the site-specific monitoring plan.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify the following information concerning the operation of the control equipment during the operation of this emissions unit:
 - a. each period of time when the pressure drop across the fiber bed filter was outside the acceptable range;
 - b. an identification of each incident of deviation described in (a) where a prompt investigation was not conducted;
 - c. an identification of each incident of deviation described in (a) where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and
 - d. an identification of each incident of deviation described in (a) where proper records were not maintained for the investigation and/or the corrective action.

These quarterly reports shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

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.

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3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible emissions were observed from the stack serving this emissions unit or any visible emissions of fugitive dust were observed and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the Akron RAQMD) by January 31 and July 31 of each year and shall cover the previous 6-month period.
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 initial stack test report, documentation of the determined normal pressure range, in inches of water, for the fiber bed filter.

V. Testing Requirements

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

- a. Emission Limitations:

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

Applicable Compliance Method:

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

- b. Emission Limitation:

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

Applicable Compliance Method:

Compliance 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, 2002.

- c. Emission Limitation:

4.94 lbs PE/hr

Applicable Compliance Method:

Compliance with the lbs/hr emission limitation shall be demonstrated based upon the test results of emission testing conducted in accordance with Methods 1 - 5 of 40 CFR, Part 60, Appendix A.

- d. Emission Limitation:

Total PE from the coater, coating mixer, sealant applicator, and adhesive applicator on the 3-wide roofing line to 0.04 kilogram per megagram (kg/Mg) (0.08 pound per ton, lb/ton) of asphalt shingle or mineral-surfaced roll roofing produced.

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Applicable Compliance Methods:

Compliance with the PE limitation above shall be determined as follows:

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

where:

E = PE rate, in kilograms of PE per megagram of roofing product manufactured;
Mpm = PE rate, in kilograms per hour, determined using Equation 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.

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

where:

Mpm = PE rate, in kilograms per hour;

C = concentration of particulate matter on a dry basis, grams per dry standard cubic meter (g/dscm), as measured by the test method specified in Table 3 to this subpart;

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 to this subpart; and

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

e. Emission Limitation:

3.86 lbs/hr of VOC

15.78 tpy VOC

Applicable Compliance Method:

If required, compliance with the hourly allowable VOC emission limitation shall be based upon the results of emission testing conducted in accordance with Methods 1 through 4, and 25 or 25A, as appropriate, of 40 CFR Part 60, Appendix A.

Compliance with the tons per year limitation shall be ensured as long as compliance with the lbs/hr limitation and the annual throughput/production limitations (as required for emissions unit P906) is maintained.

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 issuance of this permit.
 - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate(s) for particulate.
 - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): for PE, Methods 1 thru 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 Akron RAQMD.
3. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Akron RAQMD. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Akron RAQMD's refusal to accept the results of the emission test(s).

Personnel from the Akron RAQMD shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

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

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VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P912 - MLA System controlled with a fiber bed filter and dust collector - MLA melt tank, MLA use tank, MLA filler hopper, MLA mix tank, MLA applicator pan (3-wide roofing line) - modification	None	None

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

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None

VI. Miscellaneous Requirements

None