

PUBLIC NOTICE
OHIO ENVIRONMENTAL PROTECTION AGENCY
PUBLIC HEARING CONCERNING
ISSUANCE OF DRAFT SYNTHETIC MINOR
AND PREVENTION OF SIGNIFICANT DETERIORATION (PSD)
AIR PERMITS TO INSTALL
TO OWENS CORNING
MEDINA, OHIO

Public notice is hereby given that the Ohio Environmental Protection Agency (EPA) has issued on May 6, 2004, draft action of air permit to install application number 16-02347 to Owens Corning. The air contaminant sources contained within draft air permit to install number 16-02347 are subject to the applicable provisions of the Prevention of Significant Deterioration (PSD) regulations as promulgated by U.S. EPA (40 CFR 52.21) and the Ohio EPA permit to install requirements [Ohio Administrative Code (OAC) 3745-31]. This permitting action proposes to allow Owens Corning to expand its existing asphalt processing and roofing production capacity at 890 W. Smith Road in Medina, Ohio 44256.

The proposed allowable air pollutant emission rates for the air contaminant sources in draft air permit to install number 16-02347 are the following amounts:

<u>Pollutant</u>	<u>Tons/year</u>
Nitrogen Oxides (NO _x)	35.78
Sulfur Dioxide (SO ₂)	222.92
Particulate Matter <10 microns (PM ₁₀)	121.21
Particulate Matter (PM)	121.21
Carbon Monoxide (CO)	267.95
Volatile Organic Compounds	135.5
Hydrogen Sulfide (H ₂ S)	4.69
Lead	0.01
Hydrogen Chlorides (HCL)	47.01

PSD increment analyses:

SO₂: The U.S. EPA allows sources to consume no more than the maximum available ambient PSD increment(s) for each PSD pollutant. The Ohio EPA allows PSD sources to consume less than one half the available increment. This facility has demonstrated that the impacts from the new sources are less than one half the available increment for each of the averaging times. Based on this analysis, the project complies with the increment requirements for SO₂.

CO: This facility has demonstrated that the impact from the new sources is less than the PSD significant impact increments of 2000 micrograms/cubic meter and 500 micrograms/cubic meter for the one-hour and eight-hour levels, respectively. Therefore, the impact is insignificant and additional modeling is not required. Based on this analysis, the applicant has demonstrated that the project will have insignificant impact for CO.

A public hearing for the draft air permit is scheduled for June 8, 2004 in the Medina County Administrative Building (Auditorium), 144 North Broadway, Medina, Ohio and will commence at 6:00 p.m. The public hearing provides an opportunity for citizens to submit comments on the draft air permit to install. A presiding officer will be present and may limit oral testimony to ensure that all parties are heard.

All interested persons are entitled to attend or be represented and give written or oral comments on the draft air

permit to install at the hearing. Written comments must be received by the close of the business day on June 10, 2004. Comments received after this date will not be considered part of the official record.

Written comments may be submitted at the hearing or sent to: Sean Vadas of Akron Air Pollution Control at 146 South High Street, Room 904, Akron, Ohio 44308.

Copies of the draft air permit to install application and technical support information may be reviewed and/or copies made by first calling to make an appointment at the Akron Air Pollution Control, located at the above address, telephone number (330) 375-2480.

STAFF DETERMINATION FOR THE APPLICATION TO CONSTRUCT UNDER THE PREVENTION OF SIGNIFICANT DETERIORATION REGULATIONS

The federal Clean Air Act and regulations promulgated thereunder require that major air pollution stationary sources undergoing construction or modification comply with all applicable Prevention of Significant Deterioration (PSD) provisions and non-attainment area (NAA) requirements. Both of these provisions and requirements are referred to as the New Source Review (NSR) program. The federal PSD provisions govern emission increases in attainment areas for major stationary sources, which are all pollutant-emitting activities that belong to the same industrial grouping, are located on contiguous or adjacent properties, and are under common control with the potential to emit 250 tons per year or more of any pollutant regulated under the Clean Air Act, or 100 tons per year or more if the stationary source is identified as one of 28 stationary source categories. In non-attainment areas, the definition of major stationary source is one having at least 100 tons per year potential emissions. A major modification is one resulting in a contemporaneous increase in emissions which exceeds the significance level of one or more pollutants. Any changes in actual emissions within a five-year period are considered to be contemporaneous. In addition, Ohio now has incorporated the federal NSR program by rule in Ohio Administration Code (OAC) Chapter 3745-31.

Both PSD requirements and non-attainment area provisions require that certain analyses be performed before a facility can obtain a permit authorizing construction of a new stationary source or major modification to a major stationary source. The principal requirements of the PSD requirements are:

- 1) Best Available Control Technology (BACT) review - A detailed engineering review must be performed to ensure that BACT is being installed for the pollutants for which the new air contaminant source(s) is a major stationary source.
- 2) Ambient Air Quality Review - An analysis must be completed to ensure the continued maintenance of the National Ambient Air Quality Standards (NAAQS) and that any increases in ambient air pollutant concentrations do not exceed the incremental values set pursuant to the Clean Air Act.

For non-attainment areas, the requirements are:

- 1) Lowest Achievable Emissions Rate (LAER) - New major stationary sources must install controls that represent the lowest emission levels (highest control efficiency) that has been achieved in practice.
- 2) The emissions from the new major stationary source must be offset by a reduction of existing emissions of the same pollutant by at least the same amount, and a demonstration must be made that the resulting air quality shows a net air quality benefit. This is more completely described in the Emission Offset Interpretative Ruling as found in Appendix S of 40 CFR Part 51.
- 3) The facility must certify that all major stationary sources owned or operated in the state by the same entity are either in compliance with the existing State Implementation Plan (SIP) or are on an approved schedule resulting in full compliance with the SIP.

For rural ozone non-attainment areas, the requirements are:

- 1) LAER - New major stationary sources must install controls that represent the lowest emissions levels (highest control efficiency) that has been achieved in practice.
- 2) The facility must certify that all major stationary sources owned or operated in the state by the same entity are either in compliance with the existing SIP or are on an approved schedule resulting in full compliance with the SIP.

Finally, New Source Performance Standards (NSPS), New Emissions Standards for Hazardous Air Pollutants (NESHAP), including any Maximum Achievable Control Technology (MACT) standards, SIP emission standards and public participation requirements must be followed in all cases.

Site Description

The facility is in Medina, Ohio, which is located in Medina County.

Under Section 107 of the Clean Air Act as of June 24, 1992, this area (Medina County) was classified as attainment for all of the criteria pollutants, i.e., total suspended particulates (PM), particulate matter less than 10 microns (PM₁₀), sulfur dioxide (SO₂), nitrogen oxides (NO_x), carbon monoxide (CO), volatile organic compounds (ozone), and lead (Pb).

Facility Description

Owens Corning is a manufacturer of asphalt roofing products and currently operates two asphalt roofing processing lines that produce either laminated (this line is designated as 3-wide line) or non-laminated (this line is designated as 4-wide line) residential asphalt roofing products.

Owens Corning is proposing to replace and modify parts of the above mentioned asphalt roofing processing lines such that following regulations are applicable: federal PSD, NESHAP, NSPS and OAC 3745-17-10, 3745-17-11, 3745-18-06, 3745-21-07, and 3745-21-09(L).

New Source Review (NSR) which includes PSD and NAA Applicability

PSD

The existing Owens Corning facility is currently a major stationary source pursuant to NSR regulations because the potential to emit (PTE) emissions from the facility are over the 250 tons per year of one of the criteria and/or regulated pollutants. As such, emissions resulting from any modification to the facility are evaluated against the PSD significant emission rates to determine if PSD applies [in this case, the PTE for the proposed project is greater than the applicable significant rates for the following pollutants: VOC, SO₂, and CO]. See Table 1 below.

Table 1 shows the emissions from the proposed project in terms of PSD applicability and review.

Table 1

<u>Pollutant</u>		<u>Tons/Year</u>	<u>Significant Level</u>
Nitrogen Oxides (NO _x)	30.37	40	
Sulfur Dioxide (SO ₂)	39.7	40	
Particulate Matter <10 (PM ₁₀)	14.65	15	
Particulate Matter (PM)	14.65	25	
Carbon Monoxide (CO)	141.62	100	
Volatile Organic Compounds (ozone)	142.56	40	
Lead (Pb)	0.02	0.60	
Hydrogen Sulfide (H ₂ S)	2.29	10	
Benzene	1.37	Any rate*	
Ethyl Benzene	1.31	Any rate*	

* Note that both benzene and ethyl benzene emissions are being emitted from the proposed project. However, benzene and ethyl benzene are hazardous air pollutants which are regulated in this case by 40 CFR Part 63, Subpart LLLLL (MACT standard for Asphalt Processing and Asphalt Roofing Manufacturing) and per OAC rule 3745-31-01 definition significant, if air contaminant source emits a hazardous air pollutant(s) regulated by a MACT standard (section 112 under the Clean Air Act), then that pollutant(s) does not trigger the PSD review.

Based upon the above information, PSD review is required for VOC, SO₂, and CO.

Fugitive emissions from proposed project are not included because the facility is not one of the 28 stationary source categories, nor are they one of the NSPS and NESHAPS promulgated before August 8, 1980. See below the applicable NSPS and NESHAPS. operations sour.

NAA

Federal Requirements other than NSR which include PSD/NAA regulations.

- ◆ NSPS 40 CFR 60 Applicability
- ◆ NESHAP 40 CFR 63 Applicability

NSPS 40 CFR Part 60 Applicability

NSPS 40 CFR Part 60, Subpart Kb - Volatile Organic Liquid Storage Vessels

Three of the five new/modified storage tanks that will be constructed as part of the proposed project qualify exemptions promulgated on October 15, 2003. Tanks#50 and #70 are subject to Kb based on their capacity and the true vapor pressure of the materials stored.

NSPS 40 CFR Part 60, Subpart UU - Asphalt Processing and Asphalt Roofing Manufacturing

Four new/modified asphalt storage tanks and the new convertor (Convertor #2) that will be constructed as part of the production increase project meet the applicability requirements of NSPS 40 CFR Part 60, Subpart UU. Two modified coaters on the asphalt roofing lines and the two modified convertors (Convertors #5 and #6) also meet applicability requirements of this subpart.

NESHAP 40 CFR 63 Applicability

NESHAP 40 CFR 63, Subpart LLLLL - Asphalt Processing and Asphalt Roofing Manufacturing

Each asphalt processing facility, which includes one or more asphalt flux blowing stills, asphalt flux storage tanks storing asphalt flux intended for processing in the blowing stills, oxidized asphalt storage tanks, and oxidized asphalt loading racks, and

each asphalt roofing manufacturing line, which can include a saturator (including wet looper), coater, coating mixers, sealant applicators, adhesive applicators, and asphalt storage and process tanks.

BACT Review

The requirement to conduct a BACT analysis and determination is set forth in section 165(a)(4) of the Clean Air Act (Act), in federal regulations at 40 CFR Part 52.21.(j) and also in OAC rule 3745-31-15(C). The BACT requirement is defined as:

"An emissions limitation (including a visible emission standard) based on the maximum degree of reduction for each pollutant subject to regulation under the Act which would be emitted from any proposed major stationary source or major modification which the Administrator, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such source or modification through application of production or available methods, systems, and technique, including fuel cleaning or treatment or innovative fuel combustion techniques for control of such pollutant. In no event shall application of best available control technology result in emissions of any pollutant which would exceed the emissions allowed by any applicable standard under 40 CFR Parts 60 and 61. If the Administrator determines that technological or economic limitations on the application of measurement methodology to a particular emissions unit would make the imposition of an emissions standard infeasible, a design, equipment, work practice, operational standard, or combination thereof, may be prescribed instead to satisfy the requirement for the application of best available control technology. Such standard shall, to the degree possible, set forth the emissions reduction achievable by implementation of such design, equipment, work practice or operation, and shall provide for compliance by means which achieve equivalent results."

The BACT process was further formalized in a memorandum by USEPA on December 1, 1987, by introducing a "top-down" concept for BACT analysis. The top-down process requires that all available control technologies be ranked in descending order of control effectiveness. The BACT process first examines the most stringent - or "top"- alternative. That alternative is established as BACT unless it is demonstrated that technical considerations, or energy, environmental, or economic impacts justify a conclusion that the most stringent technology is not applicable. If the most stringent technology is eliminated, then the next most stringent alternative is considered, and this process is continued until an acceptable BACT is selected.

The objective of the BACT analysis is to conduct pollutant-specific control technology evaluation per USEPA requirements. The BACT evaluation steps consist of:

Step 1: identify all control technologies;

Step 2: eliminate technically infeasible options;

Step 3: ranking remaining control technologies by control effectiveness; and

Step 4: evaluate most effective controls and document results.

Based upon the above discussions, Owens Corning project is subject to PSD regulations which mandates a case-by-case BACT analysis be performed for the following pollutants: VOC, SO₂, and CO. The application used a "top-down" approach to determine an appropriate level of control.

BACT Review

For SO₂:

Step 1: identify all control technologies:

- ◆ Flue Gas Desulfurization.
- ◆ Owens Corning Proprietary Method for SO₂ Control
- ◆ Good Design/Operations

For VOC:

Step 1: identify all control technologies:

- ◆ Condenser System
- ◆ Thermal Incineration
- ◆ Catalytic Incineration
- ◆ Adsorption
- ◆ Good Design/Operation

For CO:

Step 1: identify all control technologies:

- ◆ Thermal Incineration
- ◆ Catalytic Incineration
- ◆ Good Design/Operation

BACT Analysis: Storage Tanks - - emissions units (tank numbers 46, 50, 68, 69, and 70)

Tank numbers 46, 69, and 70 are subject to 40 NSPS 40 CFR Part 60, Subpart UU - Asphalt Processing and Asphalt Roofing Manufacturing. Specifically, 40 CFR Part 60.472(c) for PM.

And tank numbers 50 and 70 are subject to NSPS 40 CFR Part 60, Subpart Kb - Volatile Organic Liquid Storage Vessels. Specifically to 40 CFR Part 60.112(b) for VOC.

And the control technologies identified above for VOC and CO.

Step 2: eliminate technically infeasible options:

Pollutant	Control Technology	Technically Feasible or Not
VOC	Condenser System	Asphalt Storage - - No
		Mineral Spirits - - Yes
VOC	Adsorption	Asphalt Storage - - No
VOC and CO	Thermal Incineration	Asphalt Storage - - Yes
		Mineral Spirits - - No
VOC and CO	Catalytic Incineration	Asphalt Storage - - No
		Mineral Spirits - - No

Step 3: ranking remaining control technologies by control effectiveness:

Pollutant	Control Technology	Control Efficiency
VOC	Thermal Incineration ^a	95%
	Adsorption ^b	95%
	Condenser System ^b	85%
	Good Design/Operation	Base Case
CO	Thermal Incineration ^a	90%
	Good Design/Operation	Base Case

^a Evaluated for tank numbers 46, 50, 69, and 70 only which store liquid asphalt.

^a Evaluated for tank number 68 only which store mineral spirits.

Step 4: evaluate most effective controls and document results:

All existing and new asphalt tanks will be vented to Thermal Incineration to control both VOC and CO emissions.

Adsorption is deemed economically infeasible due to \$157,895 per ton removed of VOC for mineral spirits tank.

Condenser System is the next most effective control.

Step 5: select BACT

Thermal Incineration is BACT for all existing and new liquid asphalt storage tanks to control both VOC and CO emissions.

Condenser System is BACT for the mineral spirits storage tank to control VOC emissions.

BACT Analysis: Heaters - - emissions units (two asphalt storage tank heaters associated with tank numbers 46 - - 1.5 MMBtu/hr each; hot oil heater number 5 - - 7 MMBtu/hr.

Step 2: eliminate technically infeasible options:

Pollutant	Control Technology	Technically Feasible or Not
VOC	Condenser System	No
VOC	Adsorption	No
VOC and CO	Thermal Incineration	Yes
VOC and CO	Catalytic Incineration	No
SO ₂	Flue Gas Desulfurization	No

Step 3: ranking remaining control technologies by control effectiveness:

Pollutant	Control Technology	Control Efficiency
VOC	Thermal Incineration	95%
	Good Design/Operation	Base Case
CO	Thermal Incineration	90%
	Good Design/Operation	Base Case
SO ₂	Good Design/Operation	Base Case

Step 4: evaluate most effective controls and document results:

Thermal Incineration is deemed economically infeasible due to \$188,485 and \$12,340 per ton removed of VOC and CO, respectively and no add on controls were found in RBLC database.

Good Design/Operation is deemed most effective control of SO₂.

Step 5: select BACT

Good Combustion Practice is deemed BACT to control both VOC and CO emissions.

Low sulfur natural gas and fuel oil (less than 0.3% and limited to 500 hour per year of operation) is deemed BACT.

BACT Analysis: Asphalt Convertors - - emissions units (two existing convertors will be modified and one new convertor will be installed.

The convertors are subject to 40 NSPS 40 CFR Part 60, Subpart UU - Asphalt Processing and Asphalt Roofing Manufacturing. NSPS Subpart UU regulates emissions from PM from each saturator, mineral handling and storage facility, asphalt storage tank, and blowing still that is constructed after November 18, 1990.

Pollutant	NSPS Limitations	Citation
PM	0.67 kg/Mg (1.3 lb/ton) of asphalt charged to the still when catalyst is added to the still; 0.60 kg/Mg (1.2 lb/ton) of asphalt charged to the still during blowing without a catalyst; 0% opacity	40 CFR Part 60.472(b), Subpart UU

Step 2: eliminate technically infeasible options:

Pollutant	Control Technology	Technically Feasible or Not
VOC	Condenser System	No
VOC	Adsorption	No
VOC and CO	Catalytic Incineration	No
VOC and CO	Thermal Incineration ^a	Yes
SO ₂	Flue Gas Desulfurization	Yes
SO ₂	Owens Corning Propriety Method ^a	Yes
VOC, CO, and SO ₂	Good Design/Operation	Yes

^aalready controlling existing convertors

Step 3: ranking remaining control technologies by control effectiveness:

Pollutant	Control Technology	Control Efficiency for the Modified Convertors (numbers 5 and 6)	Control Efficiency for the New Convertors (number 2)
VOC	Thermal Incineration	Base Case	95%
	Good Design/Operation	Not Applicable	Base Case
CO	Thermal Incineration	Base Case	90%
	Good Design/Operation	Not Applicable	Base Case
SO ₂	Flue Gas Desulfurization	50%-90%	50%-90%
SO ₂	Owens Corning Propriety Method	50%-90%	50%-90%
SO ₂	Good Design/Operation	Base Case	Base Case

Step 4: evaluate most effective controls and document results:

Thermal Incineration is deemed most effective method to control both VOC and CO.

Thermal Incineration is deemed most effective method to control SO₂.

Step 5: select BACT

Thermal Incineration is deemed BACT to control VOC, CO, and SO₂ emissions.

BACT Analysis: Coaters - - emissions units (two existing coaters are being modified on the two asphalt

roofing lines.

The coaters are subject to 40 NSPS 40 CFR Part 60, Subpart UU - Asphalt Processing and Asphalt Roofing Manufacturing. NSPS Subpart UU regulates emissions from PM from each saturator, mineral handling and storage facility, asphalt storage tank, and blowing still that is constructed after November 18, 1990.

Pollutant	NSPS Limitations	Citation
PM	0.04 kg/Mg (0.08 lb/ton) of asphalt shingle or mineral-surfaced roll roofing produced; 0.04 kg/Mg (0.80 lb/ton) of saturated felt or smooth-surfaced roll roofing produced; less than 20% opacity	40 CFR Part 60.472(a), Subpart UU

Step 2: eliminate technically infeasible options:

Pollutant	Control Technology	Technically Feasible or Not
VOC	Condenser System	No
VOC	Adsorption	No
VOC and CO	Catalytic Incineration	No
VOC and CO	Thermal Incineration ^a	Yes
SO ₂	Flue Gas Desulfurization	No
VOC, CO, and SO ₂	Good Design/Operation	Yes

Step 3: ranking remaining control technologies by control effectiveness:

Pollutant	Control Technology	Control Efficiency for Coater Number 1	Control Efficiency for Coater Number 2
VOC	Thermal Incineration	95%	95%
	Good Design/Operation	Base Case	Base Case
CO	Thermal Incineration	95%	95%
	Good Design/Operation	Base Case	Base Case
SO ₂	Good Design/Operation	Base Case	Base Case

Step 4: evaluate most effective controls and document results:

Thermal Incineration is deemed economically infeasible due to \$9,421 and \$8,554 per ton removed of VOC and CO, respectively.

Good Design/Operation is deemed the most effective method to control VOC, CO, and SO₂.

Step 5: select BACT

Good Design/Operation is deemed BACT to control VOC, CO, and SO₂ emissions.

BACT Analysis: Cooling Sections - - emissions units (cooling sections are being modified on the two asphalt

roofing lines for VOC.

Step 2: eliminate technically infeasible options:

Pollutant	Control Technology	Technically Feasible or Not
VOC	Condenser System	No
VOC	Adsorption	No
VOC	Catalytic Incineration	No
VOC	Thermal Incineration	No
VOC	Good Design/Operation	Yes

Step 3: ranking remaining control technologies by control effectiveness:

Pollutant	Control Technology	Control Efficiency
VOC	Good Design/Operation	Base Case

Step 4: evaluate most effective controls and document results:

Good Design/Operation is deemed most effective method to control VOC.

Step 5: select BACT

Good Design/Operation is deemed BACT to control VOC emissions.

BACT Analysis: Asphalt Loading Rack - - emissions units (asphalt loading rack number 3 will be modified).

Step 2: eliminate technically infeasible options:

Pollutant	Control Technology	Technically Feasible or Not
<u>VOC</u>	Condenser System	No
<u>VOC</u>	Adsorption	No
<u>VOC and CO</u>	Catalytic Incineration	No
<u>VOC and CO</u>	Thermal Incineration ^a	Yes
SO ₂	Flue Gas Desulfurization	No
VOC, CO, and SO ₂	Good Design/Operation	Yes

Step 3: ranking remaining control technologies by control effectiveness:

Pollutant	Control Technology	Control Efficiency
VOC and CO	Thermal Incineration	Base Case- - 95%
	Good Design/Operation	Base Case
SO ₂	Good Design/Operation	Base Case

Step 4: evaluate most effective controls and document results:

Thermal Incineration is deemed the most effective method to control VOC and CO.

Good Design/Operation is deemed the most effective method to control SO₂.

Step 5: select BACT

Thermal Incineration is deemed BACT to control VOC and CO.

Good Design/Operation is deemed BACT to control VOC emissions.

BACT Analysis: Asphalt Filler Mixer - - emissions units (a new filler mixer for the 3-wide roofing line [asphalt filler mixer number 1.

Step 2: eliminate technically infeasible options:

Pollutant	Control Technology	Technically Feasible or Not
VOC	Condenser System	No
VOC	Adsorption	No
VOC and CO	Catalytic Incineration	No
VOC and CO	Thermal Incineration	Yes
VOC, CO, and SO ₂	Good Design/Operation	Yes

Step 3: ranking remaining control technologies by control effectiveness:

Pollutant	Control Technology	Control Efficiency
VOC and CO	Thermal Incineration	95%
VOC and CO	Good Design/Operation	Base Case

Step 4: evaluate most effective controls and document results:

Thermal Incineration is deemed economically infeasible due to \$8,040 and \$17,086 per ton removed of VOC and CO, respectively.

Good Design/Operation is deemed the most effective method to control SO₂.

Step 5: select BACT

Good Design/Operation is deemed BACT to control both VOC and CO emissions.

Ambient Air Quality Monitoring Requirements

The Owens Corning facility installation is located in Air Quality Control Region (AQCR) 174. The area is attainment or attainment/unclassifiable for total suspended particulates, particulate matter less than 10 microns, sulfur dioxide, nitrogen oxides, carbon monoxide and lead. The area is nonattainment for ozone (8-hour).

U.S. EPA regulations require a year of ambient air quality data to be obtained as part of the PSD application. An applicant may conduct monitoring on-site, model to demonstrate a "de minimus" impact, or used existing air

quality data to fill some of the requirements of a PSD ambient air quality analysis. If monitoring is required, U.S. EPA has set up specific conditions on the acceptability of existing air quality monitors is to ensure the monitor is representative of air quality in the area.

In this instance, Owens Corning facility has conducted ambient air quality modeling that predicts the ambient air quality impact of the source(s) to be less than the monitoring de minimus concentrations for CO. For SO₂, air quality monitoring data exists in the region which Ohio EPA believes is representative of the area. Therefore, Owens Corning facility would not be required to conduct pre-application monitoring. A summary is below:

<u>Pollutant</u>	<u>Averaging Period</u>	<u>Monitoring Predicted Concentration</u>	<u>Monitoring De Minimis Concentration</u>
SO ₂	24-hour high	33.9 ug/m ³	13 ug/m ³
CO	8-hour high	144.4 ug/m ³	575 ug/m ³

Modeling

Air quality dispersion modeling was conducted to assess the effect of these sources on ambient air quality standards and PSD increments. The U.S. EPA Industrial Source Complex-Short Term (ISCST3, Version 02035) model was used for the refined modeling analysis.

ISCST3 was the appropriate model for this analysis, based on the need to model simple to intermediate terrain, the need to incorporate building wake effects, the need to predict both short-term and long-term (annual) average concentrations, and the need to incorporate impacts from multiple and separated emissions units.

ISCST3 was run with the regulatory default options (stack-tip downwash, buoyancy-induced dispersion, final plume rise), default wind speed profile categories, default potential temperature gradient, and no pollutant decay. Building downwash was assessed using either the Huber-Snyder or Schulman-Sire downwash methodology, depending on the stack and nearby building heights.

ISCST3 was run utilizing the National Weather Service meteorological data processed using the U.S. EPA PCRAMMET program. OEPA provided five years of the most recent PCRAMMET processed meteorological data on their bulletin board system. Following OEPA modeling guidance concerning representative meteorological data for various counties, the Akron Surface, Pittsburgh Upper Air (1987-1991) PCRAMMET data were used in the refined modeling analysis.

Building wake effects will influence emissions from stacks with heights less than Good Engineering Practice (GEP). ISCST3 requires input of building heights and projected building widths for 36 wind directions. The U.S. EPA Building Profile Input Program (BPIP) was used to determine the direction-specific building dimensions.

Modeling Results/Increment Analysis

Modeling was performed to assess the peak impacts and to determine whether the project would have impacts above the PSD significant impact levels. Peak predicted impacts of CO were below the significant impact levels. Therefore, no additional dispersion modeling analyses for CO was necessary.

<u>Averaging Time</u>	<u>Predicted Concentration</u>	<u>Significant Impact Level</u>
1-hour	369.8 ug/m ³	2000 ug/m ³
8-hour	144.4 ug/m ³	500 ug/m ³

The maximum predicted annual SO₂ concentrations were above the corresponding significant impact increments. Therefore additional dispersion analyses were necessary for SO₂.

PSD Increment Analyses

SO₂: Predicted concentrations of SO₂ were below their respective PSD Class II increments. The high-second-high predicted short term concentrations and peak annual concentration of SO₂ from increment consuming sources are summarized below:

<u>Averaging Time</u>	<u>Predicted Concentration</u>	<u>PSD Increment</u>
3-hour	98.5 ug/m ³	512 ug/m ³
24-hour	33.9 ug/m ³	91 ug/m ³
Annual	4.7 ug/m ³	20 ug/m ³

NAAQS Analyses

SO₂: Predicted concentrations of SO₂ were below their respective NAAQS. The high-second-high predicted short term concentrations and peak annual concentration of SO₂ from increment consuming sources are summarized below:

<u>Averaging Time</u>	<u>Background Concentration</u>	<u>Total Concentration</u>	<u>NAAQS</u>
3-hour	167.7 ug/m ³	945.7 ug/m ³	1300 ug/m ³
24-hour	76.0 ug/m ³	357.2 ug/m ³	365 ug/m ³
Annual	22.0 ug/m ³	66.2 ug/m ³	80 ug/m ³

Secondary Impact

The closest Class I area to the Owens Corning facility are Otter Creek and Dolly Sods in the State of West Virginia. These parks are located over 250 km from the Owens Corning facility. Federal PSD regulation regulations require that the reviewing authority provide written notification of projects which may affect a Class 1 area. "May effect" is typically interpreted by EPA as a major source or major modification within 100 kilometers. Since the Owens Corning facility is located greater than 200 kilometers from any Class I area, Class I and visibility impacts were not conducted..

No sensitive soil types are know to exist with the significant impact area of the Owens Corning facility. Moreover, the areas of maximum impacts are generally residential, forested, or urban, and demonstrate no obvious sensitivity to industrial air emissions. Most of the designated vegetation screening levels are equivalent to or exceed NAAQS and/or PSD increments, so that satisfaction of NAAQS and PSD increment assures compliance with sensitive vegetation screening levels. The results demonstrate maximum concentrations are well below sensitive levels.

It is not expected that there will be regional population, commercial, or industrial growth associated with this project.

Toxics Analysis

An air toxics analysis was performed for three pollutants (Benzene, Ethyl Benzene and Hydrochloric Acid) which exceeded a potential emission rate of one ton per year. Each of the predicted impacts for these pollutants were below Ohio EPA's acceptable levels as determined by the calculation of the maximum acceptable ground level concentration found within 'Option A' , Review of New Sources of Air Toxic Emissions.

Conclusions

Based upon analysis of the permit to install application and it's supporting documentation provided by Owens Corning facility, the Ohio EPA staff has determined that the proposed increase will comply with all applicable State and Federal environmental regulations and that the requirements for BACT are satisfied. Therefore, the Ohio EPA staff recommends that a permit to install be issued to Owens Corning facility.

Synthetic Minor Determination and/or **Netting Determination**

Permit To Install **16-02347**

A. Source Description

Owens Corning (OC) operates an asphalt processing and roofing production facility in Medina, in Medina County Ohio. The facility operates various boilers and heaters (emissions units B002 - B014, B101 - B107), fugitive dust sources (emissions units F102 - B109), asphalt loading racks (emissions units J001 - J003, J005 - J006), 2 paint lines (emissions units K001 - K002), a cold cleaner (emission unit L001), several asphalt convertors (emissions units P003 - P007), 2 industrial ink jet printers (emissions units P102 - P103), several mineral handling systems (emissions units P901 - P904), roofing products lines (emissions units P906 - P918), and various fixed roof storage tanks (emissions units T001, T004 - T023, and T026 - T050). Owens Corning is currently a Major Stationary Source for purposes of federal Prevention of Significant Deterioration (PSD) and state of Ohio equivalent Ohio Administrative Code (OAC) attainment provisions requirements. In this PTI, Owens Corning wishes to limit it's particulate (PM/PM-10) emission levels to avoid PSD review for (PM/PM-10), while still being major for CO, VOC, and SO₂.

B. Facility Emissions and Attainment Status

This project (increasing facility capacity and modifying existing equipment) has a potential to emit increase above baseline tons per year emission levels after the physical change and change in the methods of operation of over twenty five (25) tons per year of particulate matter (PM), fifteen (15) tons per year of particulate matter less than 10 microns (PM-10), forty (40) tons per year of sulfur dioxide (SO₂), forty (40) tons per year of nitrogen oxides (NO_x), and one hundred (100) tons per year of carbon monoxide (CO) emissions. At these emissions levels, the Akron Thermal facility would trigger PSD review for the PM, PM-10, NO_x, SO₂, and CO. This facility is located in Medina County which is currently designated as attainment for all criteria pollutants and therefore the applicability of new source review regulations would be for both federal PSD and state of Ohio attainment provisions listed in OAC chapter 31 regulations.

C. Source Emissions

The following limitations are being imposed to avoid PSD review for PM/PM-10:

1. OC is accepting a particulate emission limitation of 0.01 grains per dry standard cubic foot of particulate emissions for the following emissions units:

Mineral Filler Handling System #1 P904;
Material Surfacing Applicator #1 P905;
Asphalt Filler Mixer #2 P907;
Material Surfacing Applicator #2 P909; and
Mat Unwind #1 P916.
2. Limit asphalt throughput in J003 to 87,500 tons per rolling 12-month summation.
3. Limit asphalt throughput in J005 to 275,000 tons per rolling 12-month summation.
4. Limit combined asphalt production for P003, P006 and P007 to 395,312 tons per rolling 12-month summation.

5. Limit hours of operation of P902, P906, P908, P910, P911, and P917 to 8,250 hours per year based on a rolling 12-month summation.

Owens Corning potential emission increase will only become 14.65 tons per year compared to past actual emissions. This increase will be less than the PSD significant emission rate for PM/PM-10.

D. Conclusion

Adherence of all the terms and conditions of this permit will render Owens Corning not to be subject to either federal PSD review or state of Ohio attainment provisions regulations for PM/PM-10. However, Owens Corning is still subject to both federal PSD review and the state of Ohio attainment provisions regulations for SO₂, VOC, and CO. See staff determination in this permit for more details of that analysis.



State of Ohio Environmental Protection Agency

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

CERTIFIED MAIL

Street Address:

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

Mailing Address:

Lazarus Gov.
Center

Application No: 16-02347

DATE: 5/6/2004

Owens Corning Medina Roofing Plant
Don Hart
890 W Smith Rd
Medina, OH 44256

You are hereby notified that the Ohio Environmental Protection Agency has made a draft action recommending that the Director issue a Permit to Install for the air contaminant source(s) [emissions unit(s)] shown on the enclosed draft permit. This draft action is not an authorization to begin construction or modification of your emissions unit(s). The purpose of this draft is to solicit public comments on the proposed installation. A public notice concerning the draft permit will appear in the Ohio EPA Weekly Review and the newspaper in the county where the facility will be located. Public comments will be accepted by the field office within 30 days of the date of publication in the newspaper. Any comments you have on the draft permit should be directed to the appropriate field office within the comment period. A copy of your comments should also be mailed to Robert Hodanbosi, Division of Air Pollution Control, Ohio EPA, P.O. Box 1049, Columbus, OH, 43266-0149.

A Permit to Install may be issued in proposed or final form based on the draft action, any written public comments received within 30 days of the public notice, or record of a public meeting if one is held. You will be notified in writing of a scheduled public meeting. Upon issuance of a final Permit to Install a fee of **\$14500** will be due. Please do not submit any payment now.

The Ohio EPA is urging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Pollution Prevention at (614) 644-3469. If you have any questions about this draft permit, please contact the field office where you submitted your application, or Mike Ahern, Field Operations & Permit Section at (614) 644-3631.

Very truly yours,

Michael W. Ahern, Supervisor
Field Operations and Permit Section
Division of Air Pollution Control

CC: USEPA

ARAQMD

PUBLIC NOTICE

**ISSUANCE OF DRAFT PERMIT TO INSTALL 16-02347 FOR AN AIR CONTAMINANT SOURCE FOR
OWENS CORNING MEDINA ROOFING PLANT**

On 5/6/2004 the Director of the Ohio Environmental Protection Agency issued a draft action of a Permit To Install an air contaminant source for **Owens Corning Medina Roofing Plant**, located at **890 W Smith Rd, Medina**, Ohio.

Installation of the air contaminant source identified below may proceed upon final issuance of Permit To Install 16-02347:

Modification to Roofing Products Plant - Physical Changes, Equipment Replacement, New Installations.

Comments concerning this draft action, or a request for a public meeting, must be sent in writing to the address identified below no later than thirty (30) days from the date this notice is published. All inquiries concerning this draft action may be directed to the contact identified below.

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



**Permit To Install
Terms and
Conditions**

**Issue Date: To be entered upon final issuance
Effective Date: To be entered upon final issuance**

DRAFT PERMIT TO INSTALL 16-02347

Application Number: 16-02347
APS Premise Number: 1652050040

Permit Fee: **To be entered upon final issuance**
Name of Facility: Owens Corning Medina Roofing Plant
Person to Contact: Don Hart
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 Roofing Products Plant - Physical Changes, Equipment Replacement, New Installations.

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

Director

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 the appropriate Ohio EPA District Office or local air agency. The written reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. 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 to the appropriate Ohio EPA District Office or local air agency every six months, i.e., by January 31 and July 31 of each year for the previous six calendar months. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.
- iv. Each written report shall be signed by a responsible official certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.

2. Scheduled Maintenance/Malfunction Reporting

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction, i.e., upset, of any emissions units or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. (The definition of an upset condition shall be the same as that used in OAC rule 3745-15-06(B)(1) for a malfunction.) The verbal and written reports 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 reissuance, or modification, or for denial of a permit renewal application.
- b. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.
- c. This permit may be modified, reopened, revoked, or revoked and reissued, for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.
- d. This permit does not convey any property rights of any sort, or any exclusive privilege.
- e. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

7. Fees

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78. The permittee shall pay all applicable Permit To Install fees within 30 days after the issuance of this Permit To Install.

8. Federal and State Enforceability

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

9. Compliance Requirements

- a. Any document (including reports) required to be submitted and required by a federally

Issued: To be entered upon final issuance

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.
 - 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

Owens Corning Medina Roofing Plant

Facility ID: 1652050040

PTI Application: 16-02347

Issued: To be entered upon final issuance

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 To Install 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.

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.

Owens Corning Medina Roofing Plant

Facility ID: 1652050040

PTI Application: 16-02347

Issued: To be entered upon final issuance

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

1. Compliance Requirements

The emissions unit(s) identified in this Permit to Install shall remain in full compliance with all applicable State laws and regulations and the terms and conditions of this permit.

2. Reporting Requirements

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 quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

3. Permit Transfers

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

4. Termination of Permit To Install

This permit to install shall terminate within eighteen months of the effective date of the permit to install if the owner or operator has not undertaken a continuing program of installation or modification or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation or modification. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.

Owens Corning Medina Roofing Plant

Facility ID: 1652050040

PTI Application: 16-02347

Issued: To be entered upon final issuance

5. Construction of New Sources(s)

The proposed emissions unit(s) shall be constructed in strict accordance with the plans and application submitted for this permit to the Director of the Ohio Environmental Protection Agency. There may be no deviation from the approved plans without the express, written approval of the Agency. Any deviations from the approved plans or the above conditions may lead to such sanctions and penalties as provided under Ohio law. Approval of these plans does not constitute an assurance that the proposed facilities will operate in compliance with all Ohio laws and regulations. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed sources cannot meet the requirements of this permit or cannot meet applicable standards.

If the construction of the proposed emissions unit(s) has already begun or has been completed prior to the date the Director of the Environmental Protection Agency approves the permit application and plans, the approval does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the approved plans. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of OAC rule 3745-31-02. Furthermore, issuance of the Permit to Install does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Approval of the plans in any case is not to be construed as an approval of the facility as constructed and/or completed. Moreover, issuance of the Permit to Install is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities 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 Permit To Install for the installation or modification of any other emissions unit(s) are required for any emissions unit for which a Permit To Install is required.

8. Construction Compliance Certification

The applicant shall provide Ohio EPA with a written certification (see enclosed form) that the

Owens Corning Medina Roofing Plant

Facility ID: 1652050040

PTI Application: 16-02347

Issued: To be entered upon final issuance

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

C. Permit To Install Summary of Allowable Emissions

The following information summarizes the total allowable emissions, by pollutant, based on the individual allowable emissions of each air contaminant source identified in this permit.

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

<u>Pollutant</u>	<u>Tons Per Year</u>
PM	121.21
PM-10	121.21
SO ₂	222.92
NO _x	35.78
CO	267.95
VOC	135.5
H ₂ S	4.69
Lead	0.01
HCl	47.01

Owens Corning Medina Roofing Plant

Facility ID: 1652050040

PTI Application: 16-02347

Issued: To be entered upon final issuance

Part II - FACILITY SPECIFIC TERMS AND CONDITIONS

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

I. Applicable Emissions limitations and/or Control Requirements

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 emission units pursuant to 40 CFR Part 63, Subpart LLLLL which include, but not limited to, the following:

for each Group 1 loading rack and blowing still

- a. reduce total hydrocarbon mass emissions by 95%, or to a concentration of 20 ppmv, on a dry basis corrected to 3 percent oxygen; or
- b. route the emissions to a combustion device achieving a combustion efficiency of 99.5 percent;

for each existing coater, mixer, and saturator

- a. limit particulate matter emissions to 0.04 kilograms emissions per megagram (kg/Mg) (0.08 pounds per ton, lb/ton) of asphalt shingle or mineral-surfaced roll roofing produced;
- b. limit exhaust gases to 20 percent opacity; and
- c. limit visible emissions from the emission capture system to 20 percent of any period of consecutive valid observations totaling 60 minutes;

for each Group 2 storage tank

- a. limit exhaust gases to 0 percent opacity.

2. The permittee shall achieve total, on-going compliance with all applicable requirements of 40 CFR Part 63, Subpart LLLLL on or before the mandatory compliance date of May 1, 2006. Also, the permittee shall complete any performance test required in paragraph 63.8687 within the time limits specified in paragraph 63.8686.
3. Stack emissions shall be limited to 0.01 grains per dry standard cubic foot (gr/dscf) of particulate emissions for the following emission units:

Mineral Filler Handling System #1	P904;
Material Surfacing Applicator #1	P905;
Asphalt Filler Mixer #2	P907;
Material Surfacing Applicator #2	P909; and

Owens Corning Medina Roofing Plant**Facility ID: 1652050040****PTI Application: 16-02347****Issued: To be entered upon final issuance**

Mat Unwind #1

P916.

4. In order to comply with federal Prevention of Significant Deterioration and OAC rule 3745-31-(13) thru (20) air dispersion modeling requirements, the exhaust stack requirements shall be maintained:
- exhaust stack from the JZ thermal incinerator (egress point A43) that serves emissions units T007 - T009, T026, T029, T031 - T033, T036, T036, and P003 - P005 shall be at least 130 feet above ground level and be in compliance with all variables associated with that exhaust stack that demonstrated compliance with those requirements;
 - exhaust stack from the asphalt pre-heater (egress point A42A) that serves emissions unit B006 shall be at least 35 feet above ground level and be in compliance with all variables associated with that exhaust stack that demonstrated compliance with those requirements;
 - exhaust stack from the PCC thermal incinerator (egress point A74A) that serves emissions units T027, T030, T035, J005, P006, and P007 shall be at least 135 feet above ground level and be in compliance with all variables associated with that exhaust stack that demonstrated compliance with those requirements; and
 - exhaust stack from the emergency generator (egress points A105 and A106) that serves emissions unit B014 shall be at least 45 feet above ground level and be in compliance with all variables associated with that exhaust stack that demonstrated compliance with those requirements.
5. The following sources are subject to the applicable provisions of the New Source Performance Standards (NSPS) as promulgated by the U.S. EPA, 40 CFR Part 60:

<u>Source Number</u>	<u>Source Description</u>	<u>NSPS Regulation(s)</u>
P003	Convertor #2	UU
P006	Convertor #4	UU
P007	Convertor #5	UU
P902	Mineral Filler Handling System #1	UU
P906	Asphalt Coater/Surge Tank #1	UU
P908	Asphalt Coater/Surge Tank #2	UU
T007	Asphalt Storage Tank #50	UU & Kb
T035	Asphalt Storage Tank #46	UU & Kb
T036	Asphalt Storage Tank #69	UU & Kb
T037	Asphalt Storage Tank #70	UU & Kb
T038	Mineral Spirits Storage Tank #68	Kb

Owens Corning Medina Roofing Plant

Facility ID: 1652050040

PTI Application: 16-02347

Issued: To be entered upon final issuance

The application and enforcement of these standards are delegated to the Ohio EPA. The requirements of 40 CFR Part 60 are also federally enforceable.

Pursuant to the NSPS, the source owner/operator is hereby advised of the requirement to report the following at the appropriate times:

- a. construction date (no later than 30 days after such date);
- b. anticipated start-up date (not more than 60 days or less than 30 days prior to such date)
- c. actual start-up date (within 15 days after such date); and
- d. date of performance testing (if required, at least 30 days prior to testing).

Reports are to be sent to:

Ohio Environmental Protection Agency
DAPC - Air Quality Modeling and Planning
P.O. Box 1049
Columbus, OH 43216-1049

and

Akron Regional Air Quality Management District
Room 904
146 South High Street
Akron, OH 44308

II. Operational Restrictions

1. The permittee shall not combust any No. 2 distillate fuel oil at the entire facility (B002 - B014, B101 - B107, F102 - F109, J001 - J006, K001 - K002, L001, P003 - P007, P102 - P103, P901 - P902, P904 - P919, T001, T004 - T023, and T026 - T050) that has a sulfur content greater than 0.3% by weight.
2. The maximum annual operating hours for the firing of No. 2 distillate fuel oil in each emissions units Boiler #1 (B004), Boiler #2 (B002), and Hot Oil Heater #5 (B008) shall not exceed 500 hours per year, based upon a rolling, 12-month summation of the operating hours. The permittee has existing operation records and therefore does not need to be limited to first year monthly operating hours amounts.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain monthly records of the operating hours for the firing of No. 2 distillate fuel oil following information in each emissions units Boiler #1 (B004), Boiler #2 (B002), and Hot Oil Heater #5 (B008).
2. For each shipment of oil received for burning in this emissions unit, the permittee shall maintain records of the total quantity of oil received, the permittee's or oil supplier's analyses for sulfur

Owens Corning Medina Roofing Plant

Facility ID: 1652050040

PTI Application: 16-02347

Issued: To be entered upon final issuance

content and heat content, and the calculated sulfur dioxide emission rate (in lbs/mmBtu). (The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F).) A shipment may be comprised of multiple tank truck loads from the same supplier's batch, or may be represented by single or multiple pipeline deliveries from the same supplier's batch, and the quality of the oil for those loads or pipeline deliveries may be represented by a single batch analysis from the supplier.

The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60, Appendix A, Method 19, or the appropriate ASTM methods (such as, ASTM methods D240 and D4294), or equivalent methods as approved by the Director.

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

a. Alternative 1:

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

b. Alternative 2:

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

IV. Reporting Requirements

Owens Corning Medina Roofing Plant**Facility ID: 1652050040****PTI Application: 16-02347****Issued: To be entered upon final issuance**

1. The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling, 12-month operating hours limitations. These reports are due by the date described in Part 1 - General Terms and Conditions of this permit under section (A)(1).
2. The permittee shall notify the Director (the appropriate District Office or local air agency) in writing of any record which shows a deviation of the allowable sulfur content limitation based upon the calculated sulfur content from Section A.III above. The notification shall include a copy of such record and shall be sent to the Director (the appropriate District Office or local air agency) within 45 days after the deviation occurs.

V. Testing Requirements

1. The permittee shall conduct, or have conducted, emission testing for the following emissions units:

Mineral Filler Handling System #1	P904;
Material Surfacing Applicator #1	P905;
Asphalt Filler Mixer #2	P907;
Material Surfacing Applicator #2	P909; and
Mat Unwind #1	P916,

in accordance with the following requirements:

2. The emission testing shall be conducted within 6 months after issuance of the permit.
3. The emission testing shall be conducted to demonstrate compliance with the stack particulate emission limitation.
4. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): for particulates, 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.
5. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

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

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to

Owens Corning Medina Roofing Plant

Facility ID: 1652050040

PTI Application: 16-02347

Issued: To be entered upon final issuance

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

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

VI. Miscellaneous Requirements

None

Owens Corning Medina Roofing Plant

Facility ID: 1652050040

PTI Application: 16-02347

Issued: To be entered upon final issuance

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

1. The permit to install for these emissions units (J003, J005, P003, P006 - P007, P902, P906, P908 T007, T035 - T038) were evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions units' exhaust systems, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by these emissions units using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: HCl

TLV (mg/m³): 2.20 (based on 2 ppm STEL)

Modeled Emission Rate (lbs/hr): 5.906 (total)

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m³): 22.7

MAGLC (ug/m³): 52.4 (the application presents a value of 131.6 ppm based on the 7.5 mg/m³ STEL)

Pollutant: Benzene

TLV (mg/m³): 1.60 (based on 0.5 ppm TWA)

Modeled Emission Rate (lbs/hr): 0.455 (total)

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m³): 1.8

MAGLC (ug/m³): 38.1

Pollutant: Ethyl Benzene

TLV (mg/m³): 434 (based on 100 ppm TWA)

Modeled Emission Rate (lbs/hr): 0.429 (total)

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m³): 1.7

MAGLC (ug/m³): 10,333

2. Physical changes to or changes in the method of operation of these emissions units after its installation or modification could affect the parameters used to determine whether or not the "Air

Owens Corning Medina Roofing Plant
PTI Application: 16-02347

Facility ID: 1652050040

Issued: To be entered upon final issuance

Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be still satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

- a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
- b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
- c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

3. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy:"
 - a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
 - b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
 - c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

Owen
PTI A

Emissions Unit ID: **J003**

Issued: To be entered upon final issuance

40 CFR Part 63, Subpart
LLLLL

Applicable Emissions
Limitations/Control Measures

The requirements of this rule also includes compliance with the requirements of OAC rules 3745-21-07(E), 3745-31-(13) thru (20), 3745-31-05(C), and 40 CFR Part 63, Subpart LLLLL.

Particulate matter (PM) and particulate matter less than ten microns in diameter (PM-10) emissions shall not exceed 4.68 lbs/hr.

Sulfur dioxide (SO₂) emissions shall not exceed 0.58 lb/hr.

Carbon monoxide (CO) emissions shall not exceed 0.25 lb/hr.

Hydrogen sulfides (H₂S) emissions shall not exceed 0.34 lb/hr.

Volatile organic compound (VOC) emissions shall not exceed 16.60 lbs/hr.

The hourly emission limitations outlined are based upon the emission unit's Potential to Emit (PTE). Therefore, no hourly records are required to demonstrate compliance with these limitations.

The overall control efficiency shall not be less than 95% for PM/PM-10 and H₂S.

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

The emission limitations specified by these rules are less stringent than the emissions limitations established pursuant to OAC rule 3745-31-05(A)(3).

Exempt.

See A.II.3 below.

The tons per rolling 12-month period shall not exceed:

CO - 0.17

VOC - 6.42

SO₂ - 0.39

The overall control efficiency shall not be less than 95% for CO and VOC.

The total annual asphalt loaded from this emissions unit shall not exceed 87,500 tons per year, as a rolling, 12-month summation.

The tons per rolling 12-month period shall not exceed:

1.81 tpy PM/PM-10

0.003 tpy H₂S.

See A.II.2 below.

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

route the emissions to a combustion

Owen:

PTI A

Emissions Unit ID: **J003**

Issued: To be entered upon final issuance

device achieving a
combustion efficiency of
99.5 percent.

The compliance date for this
rule is May 1, 2006.

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

1. The permittee shall only operate two (2) emissions units simultaneously of the following emissions units: Loading Rack #1 (J001), Loading Rack #2 (J002), and Loading Rack #3 (J003).
2. The maximum annual asphalt throughput limitation for this emissions unit shall not exceed 87,500 tons per year, based upon a rolling, 12-month summation of the monthly asphalt throughput. The permittee has existing asphalt production records and therefore does not need to be limited to first year monthly asphalt throughput amounts.
3. The permittee shall only load asphalt which is not a photochemically reactive material, as defined in OAC rule 3745-21-01(C)(5).
4. The average combustion temperature within the thermal incinerator, for any 3-hour block of time when the emissions unit is in operation, shall not be less than 1450 degrees Fahrenheit.
5. The operating range for the vacuum manifold shall be continuously maintained within a range of 2 to 8 inches of water while the emissions unit is in operation.

III. Monitoring and/or Record keeping Requirements

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

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

- a. all 3-hour blocks of time during which the average combustion temperature within the thermal incinerator, when the emissions unit was in operation, was less than 1450 degrees Fahrenheit; and
 - b. a log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.
2. The permittee shall maintain documentation showing whether or not each asphalt material is a photochemically reactive material.
 3. The permittee shall maintain monthly records of the following information:
 - a. the asphalt throughput rate for each month;
 - b. operating times of emissions units Loading Rack #1 (J001), Loading Rack #2 (J002), and Loading Rack #3 (J003);
 - c. the PM/PM-10, H₂S, CO, VOC, and SO₂ emissions for each month;
 - d. the rolling, 12-month summation of the asphalt monthly throughput rates; and
 - e. the rolling, 12-month summation of the PM/PM-10, H₂S, CO, VOC, and SO₂ emissions rates.
 4. The permittee shall install, operate and maintain a continuous monitor and recorder which measures the pressure in the vacuum manifold while the emissions unit is in operation. The monitoring equipment and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modification deemed necessary by the permittee. Exceedance of the normal operating pressure range shall require shutdown, investigation of any problems and corrective action to enable operation in the normal range.

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

IV. Reporting Requirements

1. The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing if a "photochemically reactive material" [as defined in OAC rule 3745-21-01(C)(5)] is employed in the emissions unit. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 45 days after such an occurrence.
2. The permittee shall submit quarterly deviation (excursion) reports which identify
 - a. all exceedances of operating more than 2 of the following emissions units: Loading Rack

Issued: To be entered upon final issuance

#1 (J001), Loading Rack #2 (J002), and Loading Rack #3 (J003);

- b. all 3-hour blocks of time during which the average combustion temperature within the thermal incinerator does not comply with the temperature limitation specified above;
 - c. all exceedances of the rolling, 12-month asphalt throughput limitation;
 - d. all exceedances of the rolling, 12-month emissions limitations; and
 - e. all periods of time during which the pressure in the vacuum manifold exceeded the normal operating range.
3. The quarterly deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c of this permit.
 4. The permittee shall also submit annual reports which specify the total PM/PM-10, SO₂, CO, VOC, and H₂S emissions from this emission unit for the previous calendar year. These reports shall be submitted by January 31 of each year.

V. Testing Requirements

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

Emission Limitation:

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

Applicable compliance methods:

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, except as provided under OAC rule 3745-17-07(A)(1)(b).

2. Emissions Limitations:

4.68 lbs/hr of PM/PM-10

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

Applicable Compliance Methods:

The lbs/hr emission limitation was based on the emission unit's potential to emit. The production information used to generate the lbs/hr emission calculation is confidential. Therefore, no detailed emission calculation can be provided. As long as the permittee is in compliance with the operational requirements specified in A.II.4, compliance with the lbs/hr emission limitation is ensured. Compliance with tons per year limitation based upon a rolling, 12-month summation can be ensured by compliance with the lbs/hr limitation and the annual throughput limitation based upon a rolling, 12-month summation in term A.II.2.

If required, compliance shall be determined using the following methods:

For PM, Methods 1 thru 4, 5 and 5A of 40 CFR Part 60, Appendix A.

For PM-10, Methods 1 thru 4, 5 and 201 of 40 CFR Part 51, Appendix M.

3. Emissions Limitations:

0.58 lb/hr of SO₂

0.39 ton per year of SO₂, based upon a rolling, 12-month summation.

Applicable Compliance Methods:

The lb/hr emission limitation was based on the emission unit's potential to emit. The production information used to generate the lb/hr emission calculation is confidential. Therefore, no detailed emission calculation can be provided. As long as the permittee is in compliance with the operational requirements specified in A.II.4, compliance with the lb/hr emission limitation is ensured. Compliance with ton per year limitation based upon a rolling, 12-month summation can be ensured by compliance with the lb/hr limitation and the annual throughput limitation based upon a rolling, 12-month summation in term A.II.2.

If required, compliance shall be determined using the following methods:

Methods 1 thru 4 and 6 of 40 CFR Part 60, Appendix A.

4. Emissions Limitations:

0.25 lb/hr of CO

0.17 ton per year of CO, based upon a rolling, 12-month summation.

Applicable Compliance Methods:

The lb/hr emission limitation was based on the emissions unit's potential to emit. The production information used to generate the lb/hr emission calculations is confidential. Therefore, no detailed emission calculations can be provided. As long as the permittee is in compliance with the operational requirements specified in A.II.4, compliance with the lb/hr emission limitation is

Issued: To be entered upon final issuance

ensured. Compliance with ton per year, based upon a rolling, 12-month summation, limitation can be ensured by compliance with the lb/hr limitation and the annual based upon a rolling, 12-month summation throughput limitation in term A.II.2.

If required, compliance shall be determined using the following methods:

Methods 1 thru 4 and 10 or 10B of 40 CFR Part 60, Appendix A.

5. Emissions Limitations:

16.60 lbs/hr of VOC

6.42 tons per year of VOC, based upon a rolling, 12-month summation.

Applicable Compliance Methods:

The lbs/hr emission limitation was based on the emission unit's potential to emit. The production information used to generate the lbs/hr emission calculation is confidential. Therefore, no detailed emission calculation can be provided. As long as the permittee is in compliance with the operational requirements specified in A.II.4, compliance with the lbs/hr emission limitation is ensured. Compliance with tons per year limitation based upon a rolling, 12-month summation can be ensured by compliance with the lbs/hr limitation and the annual throughput limitation based upon a rolling, 12-month summation in A.II.2.

If required, compliance shall be determined using the following methods:

Methods 1 thru 4 and 18 or 25 of 40 CFR Part 60, Appendix A.

6. Emissions Limitations:

0.34 lb/hr of H₂S

0.003 ton per year of H₂S, based upon a rolling, 12-month summation.

Applicable Compliance Methods:

The lb/hr emission limitation was based on the emission unit's potential to emit. The production information used to generate the lb/hr emission calculation is confidential. Therefore, no detailed emission calculation can be provided. As long as the permittee is in compliance with the operational requirements specified in A.II.4, compliance with the lb/hr emission limitation is ensured. Compliance with ton per year limitation based upon a rolling, 12-month summation can be ensured by compliance with the lb/hr limitation and the annual throughput limitation based upon a rolling, 12-month summation in term A.II.2.

Owens Corning Medina Roofing Plant
PTI Application: 16-02247
Issued

Facility ID: 1652050040

Emissions Unit ID: J003

If required, compliance shall be determined using the following methods:

Methods 1 thru 4 and 15 of 40 CFR Part 60, Appendix A.

7. **Operational Limitation:**

The total annual asphalt loaded from this emissions unit shall not exceed 87,500 tons per year, as a rolling, 12-month summation.

Applicable Compliance Method:

Record keeping requirements in term A.III.3.

47

Owen:

PTI A

Emissions Unit ID: **J003**

Issued: To be entered upon final issuance

VI. Miscellaneous Requirements

1. The following terms and conditions of this permit are federally enforceable: A.I through A.V.

Owen
PTI A

Emissions Unit ID: **J003**

Issued: To be entered upon final issuance

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>
J003 - Asphalt Loading Rack #3 controlled with regenerative thermal incinerator - Modification	OAC rule 3745-31-05	None

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Record keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

49

Owen:

PTI A

Issued: To be entered upon final issuance

Emissions Unit ID: **J003**

Owen
PTI A

Emissions Unit ID: J005

Issued: To be entered upon final issuance

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>
J005 - Asphalt Loading Rack #4 controlled with PCC thermal incinerator - Modification	OAC rule 3745-31-05(A)(3)

Owen:
PTI A

Emissions Unit ID: J005

Issued: To be entered upon final issuance

		Applicable Emissions <u>Limitations/Control Measures</u>
	40 CFR Part 63, Subpart LLLLL	<p>The requirements of this rule also includes compliance with the requirements of OAC rules 3745-21-07(E), 3745-31-(13) thru (20), 3745-31-05(C), and 40 CFR Part 63, Subpart LLLLL.</p> <p>Particulate matter (PM) and particulate matter less than ten microns in diameter (PM-10) emissions shall not exceed 5.44 lbs/hr.</p> <p>Sulfur dioxide (SO₂) emissions shall not exceed 1.16 lbs/hr.</p> <p>Carbon monoxide (CO) emissions shall not exceed 0.52 lb/hr.</p> <p>Hydrogen sulfides (H₂S) emissions shall not exceed 0.686 lb/hr.</p> <p>Volatile organic compound (VOC) emissions shall not exceed 19.29 lbs/hr.</p> <p>The hourly emission limitations outlined are based upon the emission unit's Potential to Emit (PTE). Therefore, no hourly records are required to demonstrate compliance with these limitations.</p> <p>The overall control efficiency shall not be less than 95% for PM/PM-10 and H₂S.</p> <p>PM emissions from the natural gas combustion of the PCC incinerator controlling emissions units J005, P006 - P007, T027, T030, and T035 shall not exceed 0.17 pound per hour and 0.76 ton</p>
<p>OAC rule 3745-17-07(A)(1) OAC rule 3745-17-11(B)(1) OAC rule 3745-18-06</p>		
<p>OAC rule 3745-21-07(E)</p>		
<p>OAC rule 3745-31- (13) thru (20)</p>		
<p>OAC rule 3745-31-05(C)</p>		

Owens Corning Medina Roofing Plant

PTI Application: 16-02247

Issued

Facility ID: 1652050040

Emissions Unit ID: J005

per year.

NO_x emissions from the natural gas combustion of the PCC incinerator controlling emissions units J005, P006 - P007, T027, T030, and T035 shall not exceed 1.72 pounds per hour and 7.56 tons per year.

SO₂ emissions from the natural gas combustion of the PCC incinerator controlling emissions units J005, P006 - P007, T027, T030, and T035 shall not exceed 3.68 pounds per hour and 16.11 tons per year.

CO emissions from the natural gas combustion of the PCC incinerator controlling emissions units J005, P006 - P007, T027, T030, and T035 shall not exceed 0.99 pound per hour and 4.33 tons per year.

OC emissions from the natural gas combustion of the PCC incinerator controlling J005, P006 - P007, T027, T030, and T035 shall not exceed 0.06 pound per hour and 0.28 ton per year.

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

The emissions limitations

specified by these rules are less stringent than the emissions limitations established pursuant to OAC rule 3745-31-05(A)(3).

Exempt.
See A.II.2 below.

The tons per rolling 12-month period shall not exceed:

CO - 0.52
VOC - 20.16
SO₂ - 1.22.

The overall control efficiency shall not be less than 95% for CO and VOC.

The total annual asphalt loaded from this emissions unit shall not exceed 275,000 tons per year, as a rolling, 12-month summation.

The tons per rolling 12-month period shall not exceed:

5.69 tpy PM/PM-10
0.070 tpy H₂S.

See A.II.1 below.

Exempt, Group 2 source.

The compliance date for this rule is May 1, 2006.

Issued: To be entered upon final issuance**2. Additional Terms and Conditions****2.a** None**II. Operational Restrictions**

1. The maximum annual asphalt throughput limitation for this emissions unit shall not exceed 275,000 tons per year, based upon a rolling, 12-month summation of the monthly asphalt throughput. The permittee has existing asphalt production records and therefore does not need to be limited to first year monthly asphalt throughput amounts.
2. The permittee shall only load asphalt which is not a photochemically reactive material, as defined in OAC rule 3745-21-01(C)(5).
3. The average combustion temperature within the thermal incinerator, for any 3-hour block of time when the emissions unit is in operation, shall not be less than 1450 degrees Fahrenheit.
4. The operating range for the vacuum manifold shall be continuously maintained within a range of 2 to 8 inches of water while the emissions unit is in operation.

III. Monitoring and/or Record keeping Requirements

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

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

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

3. The permittee shall maintain monthly records of the following information:
 - a. the asphalt throughput rate for each month;
 - b. the PM/PM-10, H₂S, CO, VOC, and SO₂ emissions for each month;
 - c. the rolling, 12-month summation of the asphalt monthly throughput rates; and
 - d. the rolling, 12-month summation of the PM/PM-10, H₂S, CO, VOC, and SO₂ emissions rates.

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

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

IV. Reporting Requirements

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

2. The permittee shall submit quarterly deviation (excursion) reports which identify
 - a. all 3-hour blocks of time during which the average combustion temperature within the thermal incinerator does not comply with the temperature limitation specified above;
 - b. all exceedances of the rolling, 12-month asphalt throughput limitation;
 - c. all exceedances of the rolling, 12-month emissions limitations; and,
 - d. all periods of time during which the pressure in the vacuum manifold exceeded the normal operating range.

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

Issued: To be entered upon final issuance

4. The permittee shall also submit annual reports which specify the total PM/PM-10, SO₂, CO, VOC, and H₂S emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.

V. Testing Requirements

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

Emission Limitation:

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

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, except as provided under OAC rule 3745-17-07(A)(1)(b).

Issued: To be entered upon final issuance

2. Emissions Limitations:

5.44 lbs/hr of PM/PM-10

5.69 tons per year of PM/PM-10, based upon a the rolling, 12-month summation.

Applicable Compliance Methods:

The lbs/hr emission limitation was based on the emission unit's potential to emit. The production information used to generate the lbs/hr emission calculation is confidential. Therefore, no detailed emission calculation can be provided. As long as the permittee is in compliance with the operational requirements specified in A.II.3, compliance with the lbs/hr emission limitation is ensured. Compliance with tons per year limitation based upon a rolling, 12-month summation can be ensured by compliance with the lbs/hr limitation and the annual throughput limitation based upon a rolling, 12-month summation in term A.II.1.

If required, compliance shall be determined using the following methods:

For PM, Methods 1 thru 4, 5 and 5A of 40 CFR Part 60, Appendix A.

For PM-10, Methods 1 thru 4, 5 and 201 of 40 CFR Part 51, Appendix M.

3. Emissions Limitations:

1.16 lbs/hr of SO₂1.22 tons per year of SO₂, based upon a rolling, 12-month summation

Applicable Compliance Methods:

The lbs/hr emission limitation was based on the emission unit's potential to emit. The production information used to generate the lbs/hr emission calculation is confidential. Therefore, no detailed emission calculation can be provided. As long as the permittee is in compliance with the operational requirements specified in A.II.3, compliance with the lbs/hr emission limitation is ensured. Compliance with tons per year limitation based upon a rolling, 12-month summation can be ensured by compliance with the lbs/hr limitation and the annual throughput limitation based upon a rolling, 12-month summation in term A.II.1.

If required, compliance shall be determined using the following methods:

Methods 1 thru 4 and 6 of 40 CFR Part 60, Appendix A.

4. Emissions Limitations:

Owens Corning Medina Roofing Plant

PTI Application: 16-02247

Issued

Facility ID: 1652050040

Emissions Unit ID: J005

0.50 lb/hr of CO

0.52 ton per year of CO, based upon a rolling, 12-month summation

Issued: To be entered upon final issuance

Applicable Compliance Methods:

The lb/hr emission limitation was based on the emission unit's potential to emit. The production information used to generate the lb/hr emission calculation is confidential. Therefore, no detailed emission calculation can be provided. As long as the permittee is in compliance with the operational requirements specified in A.II.3, compliance with the lb/hr emission limitation is ensured. Compliance with ton per year limitation based upon a rolling, 12-month summation can be ensured by compliance with the lb/hr limitation and the annual throughput limitation based upon a rolling, 12-month summation in term A.II.1.

If required, compliance shall be determined using the following methods:

Method 1 thru 4 and 10 or 10B of 40 CFR Part 60, Appendix A.

5. Emissions Limitations:

19.29 lbs/hr of VOC

20.16 tons per year of VOC, based upon a rolling, 12-month summation

Applicable Compliance Methods:

The lbs/hr emission limitation was based on the emission unit's potential to emit. The production information used to generate the lbs/hr emission calculation is confidential. Therefore, no detailed emission calculation can be provided. As long as the permittee is in compliance with the operational requirements specified in A.II.3, compliance with the lbs/hr emission limitation is ensured. Compliance with tons per year limitation based upon a rolling, 12-month summation can be ensured by compliance with the lbs/hr limitation and the annual throughput limitation based upon a rolling, 12-month summation in term A.II.1.

If required, compliance shall be determined using the following methods:

Methods 1 thru 4 and 18 or 25 of 40 CFR Part 60, Appendix A.

6. Emissions Limitations:

0.686 lb/hr of H₂S

0.070 ton per year of H₂S, based upon a rolling, 12-month summation

Applicable Compliance Methods:

The lb/hr emission limitation was based on the emission unit's potential to emit. The production

Issued: To be entered upon final issuance

information used to generate the lb/hr emission calculation is confidential. Therefore, no detailed emission calculation can be provided. As long as the permittee is in compliance with the operational requirements specified in A.II.3, compliance with the lb/hr emission limitation is ensured. Compliance with ton per year summation limitation based upon a rolling, 12-month can be ensured by compliance with the lb/hr limitation and the annual throughput limitation based upon a rolling, 12-month summation in term A.II.1.

If required, compliance shall be determined using the following methods:

Methods 1 thru 4 and 15 of 40 CFR Part 60, Appendix A.

7. Emissions Limitations:

0.17 lb/hr of PM (products of combustion from incinerator)
0.76 ton per year of PM

Applicable Compliance Methods:

Compliance with the lb/hr emission limitation shall be determined by multiplying the maximum input capacity (12 MMBtu/hr) by the AP-42 emission factor for the combustion of fuel oil. Compliance with the annual emission limitation shall be determined by multiplying the short term limitation by 8760 hours per year and dividing by 2000 to convert to ton per year.

8. Emissions Limitations:

0.99 lb/hr of CO (products of combustion from incinerator)
4.33 tons per year of CO

Applicable Compliance Methods:

Compliance with the lb/hr emission limitation shall be determined by multiplying the maximum input capacity (12 MMBtu/hr) by the AP-42 emission factor for the combustion of natural gas. Compliance with the annual emission limitation shall be determined by multiplying the short term limitation by 8760 hours per year and dividing by 2000 to convert to tons per year.

9. Emissions Limitations:

3.68 lb/hr of SO₂ (products of combustion from incinerator)
16.11 tons per year of SO₂

Applicable Compliance Methods:

Owens Corning Medina Roofing Plant**PTI Application: 16-02247****Issued****Facility ID: 1652050040**

Emissions Unit ID: J005

Compliance with the lbs/hr emission limitation shall be determined by multiplying the maximum input capacity (12 MMBtu/hr) by the AP-42 emission factor for the combustion of fuel oil. Compliance with the annual emission limitation shall be determined by multiplying the short term limitation by 8760 hours per year and dividing by 2000 to convert to tons per year.

Issued: To be entered upon final issuance

10. Emissions Limitations:

0.06 lb/hr of VOC (products of combustion from incinerator)
0.28 ton per year of VOC

Applicable Compliance Methods:

Compliance with the lb/hr emission limitation shall be determined by multiplying the maximum input capacity (12 MMBtu/hr) by the AP-42 emission factor for the combustion of natural gas. Compliance with the annual emission limitation shall be determined by multiplying the short term limitation by 8760 hours per year and dividing by 2000 to convert to ton per year.

11. Emissions Limitations:

1.72 lbs/hr of NO_x (products of combustion from incinerator)
7.56 tons per year of NO_x

Applicable Compliance Methods:

Compliance with the lbs/hr emission limitation shall be determined by multiplying the maximum input capacity (12 MMBtu/hr) by the AP-42 emission factor for the combustion of fuel oil. Compliance with the annual emission limitation shall be determined by multiplying the short term limitation by 8760 hours per year and dividing by 2000 to convert to tons per year.

12. Operational Limitation:

The total annual asphalt loaded from this emissions unit shall not exceed 275,000 tons per year, as a rolling, 12-month summation.

Applicable Compliance Method:

Record keeping requirements in term A.III.3.

VI. Miscellaneous Requirements

1. The following terms and conditions of this permit are federally enforceable: A.I through A.V.

Owen
PTI A

Emissions Unit ID: J005

Issued: To be entered upon final issuance

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>
J005 - Asphalt Loading Rack #4 controlled with PCC thermal incinerator - Modification	OAC rule 3745-31-05	None

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Record keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

63

Owen

PTI A

Issued: To be entered upon final issuance

Emissions Unit ID: J005

Owen
PTI A

Emissions Unit ID: P003

Issued: To be entered upon final issuance

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>
P003 - Convertor #2 - asphalt blowing still with thermal incinerator - Modification	OAC rule 3745-31-05(A)(3)

Emissions Unit ID: P003

		<p>Applicable Emissions <u>Limitations/Control Measures</u></p>
	OAC rule 3745-31-05(C)	<p>The requirements of this rule also include compliance with the requirements of OAC rules 3745-23-06, 3745-31- (13) thru (20), 3745-31-05(C), 40 CFR Part 60, Subpart UU, and 40 CFR Part 63, Subpart LLLLL.</p>
	40 CFR Part 60, Subpart UU	<p>Particulate matter (PM) and particulate matter less than ten microns in diameter (PM-10) emissions shall not exceed 3.07 lbs/hr</p>
		<p>Nitrogen oxides (NO_x) emissions shall not exceed 2.47 lbs/hr and 10.80 tons per year.</p>
		<p>Hydrogen sulfides (H₂S) emissions shall not exceed 0.15 lb/hr.</p>
		<p>Hydrogen chloride (HCl) emissions shall not exceed 3.08 lbs/hr and 13.49 tons per year.</p>
	40 CFR Part 63, Subpart LLLLL	<p>Lead emissions shall not exceed 9.18E-04 lb/hr and 4.02E-03 ton per year.</p>
<p>OAC rule 3745-17-07(A) OAC rule 3745-17-11 OAC rule 3745-18-06</p>		<p>Sulfur dioxide (SO₂) shall not exceed 23.25 lbs/hr.</p>
<p>OAC rule 3745-23-06</p>		<p>Carbon monoxide (CO) emissions shall not exceed 15.13 lbs/hr.</p>
<p>OAC rule 3745-31- (13) thru (20)</p>		<p>Volatile organic compound (VOC) emissions shall not exceed 1.74 lbs/hr.</p>
		<p>The hourly and annual emission limitations outlined are based upon the emission unit's Potential to Emit (PTE). Therefore, no hourly or annual records are required to demonstrate compliance with these limitations.</p>

Owen:

PTI A

Emissions Unit ID: P003

Issued: To be entered upon final issuance

Visible particulate emissions shall not exceed 0% opacity from the exhaust stack.	natural gas combustion of the JZ incinerator controlling emissions units P003 - P005, T007 - T009, T026, T029, T031 - T033, T036, and T037 shall not exceed 0.84 pound per hour and 3.68 tons per year.	shall not exceed: 13.45 tpy PM/PM-10 0.67 tpy H ₂ S. See A.II.3 below.
The overall control efficiency shall not be less than 95% for PM/PM-10 and H ₂ S.	OC emissions from the natural gas combustion of the JZ incinerator controlling P003 - P005, T007 - T009, T026, T029, T031 - T033, T036, and T037 shall not exceed 0.05 pound per hour and 0.24 ton per year.	0.60 kilograms of particulate/megagram of asphalt charged to the still (1.2 lbs/ton). 0.67 kilograms of particulate/megagram of asphalt charged to the still when a catalyst is added to the still (1.3 lbs/ton).
PM emissions from the natural gas combustion of the JZ incinerator controlling emissions units P003 - P005, T007 - T009, T026, T029, T031 - T033, T036, and T037 shall not exceed 0.15 pound per hour and 0.64 ton per year.	The emissions limitations specified by these rules are less stringent than the emissions limitations established pursuant to OAC rule 3745-31-05 (A)(3).	Visible particulate emissions shall not exceed 0% opacity for the exhaust gases. Reduce total hydrocarbon mass emissions by 95%, or to a concentration of 20 ppmv, on a dry basis corrected to 3 percent oxygen; or
NO _x emissions from the natural gas combustion of the JZ incinerator controlling emissions units P003 - P005, T007 - T009, T026, T029, T031 - T033, T036, and T037 shall not exceed 1.47 pounds per hour and 6.43 tons per year.	See A.I.2.a below. The tons per rolling 12-month period shall not exceed:	route the emissions to a combustion device achieving a combustion efficiency of 99.5 percent.
SO ₂ emissions from the natural gas combustion of the JZ incinerator controlling emissions units P003 - P005, T007 - T009, T026, T029, T031 - T033, T036, and T037 shall not exceed 3.13 pounds per hour and 13.69 tons per year.	CO - 66.62 VOC - 7.61 SO ₂ - 65.38	The compliance date for this rule is May 1, 2006.
CO emissions from the	The overall control efficiency shall not be less than 95% for CO and VOC. The total annual combined asphalt production rate from emission units P003, P006, and P007 shall not exceed 395,312 tons per year, as a rolling, 12-month summation.	
CO emissions from the	The tons per rolling 12-month period	

Issued: To be entered upon final issuance**2. Additional Terms and Conditions**

- 2.a** The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rules 3745-23-06 by committing to comply with the best available technology requirements established in Permit to Install 16-02347.

II. Operational Restrictions

1. The average combustion temperature within the thermal incinerator, for any 3-hour block of time when the emissions unit is in operation, shall not be less than 1450 degrees Fahrenheit.
2. The operating pressure range for the vacuum manifold shall be continuously maintained within a range of 2 to 8 inches of water while the emissions unit is in operation.
3. The maximum total annual asphalt processed in emissions units P003, P006 and P007, combined shall not exceed 395,312 tons per year, based upon a rolling, 12-month summation of the asphalt processed rates. The permittee has existing asphalt production records and therefore does not need to be limited to first year monthly asphalt throughput amounts.

III. Monitoring and/or Record keeping Requirements

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

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

- a. all 3-hour blocks of time during which the average combustion temperature within the fume incinerator, when the emissions unit was in operation, was less than 1450 degrees Fahrenheit; and,
 - b. a log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.
2. The permittee shall install, operate and maintain a continuous monitor and recorder which measures the pressure in the vacuum manifold while the emissions unit is in operation. The monitoring equipment and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary

Emissions Unit ID: P003

by the permittee. Exceedance of the normal operating pressure range shall require shutdown, investigation of any problems and corrective action to enable operation in the normal range.

3. The permittee shall maintain monthly records which show the date(s) and time(s) when the vacuum manifold pressure falls below normal operating levels. These records shall be kept on site and be made available to the Director, or any authorized representative of the Director, for review during normal business hours.
4. The permittee shall maintain monthly records of the following information:
 - a. the asphalt throughput rate for each month;
 - b. the rolling, 12-month summation of the asphalt monthly throughput rates;
 - c. the emission rates for PM/PM-10, H₂S, CO, VOC, and SO₂; and
 - d. the rolling, 12-month summation of the PM/PM-10, H₂S, CO, VOC, and SO₂ emissions rates.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports which identify all 3-hour blocks of time during which the average combustion temperature within the fume incinerator does not comply with the temperature limitation specified in term A.II.1. This report shall contain, as a minimum, the date, time or occurrence, cause, explanation and corrective action taken for any temperature variations identified.
2. The permittee shall submit quarterly deviation (excursion) reports which identify:
 - a. all exceedances of the rolling, 12-month asphalt processing rate limitation in term A.II.3; and
 - b. all exceedances of the rolling, 12-month emissions limitations.
3. The permittee shall submit quarterly deviation (excursion) reports which identify all times during which the pressure in the vacuum manifold exceeded the normal operating range. This report shall contain, as a minimum, the date, time or occurrence, cause, explanation and corrective action taken for any exceedances identified.
4. The quarterly deviation reports shall be submitted in accordance with the reporting requirements specified in Part I - General Term and Condition A.1.c of this permit.
5. The permittee shall also submit annual reports which specify the total PM/PM-10, SO₂, CO, VOC, and H₂S emissions from this emissions unit for the previous calendar year. These reports shall be

submitted by January 31 of each year.

V. Testing Requirements

1. The permittee shall conduct, or have conducted, emission testing in accordance with the following requirements:
2. The emission testing shall be conducted within 6 months after issuance of the permit.
3. The emission testing shall be conducted to demonstrate compliance with the stack particulate emission limitation.
4. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): for particulates, 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.
5. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

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

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

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

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

Issued: To be entered upon final issuance

a. Emission Limitation:

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

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, except as provided under OAC rule 3745-17-07(A)(1)(b).

b. Emissions Limitations:

3.07 lbs/hr of PM/PM-10

13.45 ton per year of PM/PM-10, based upon a the rolling, 12-month summation.

Applicable Compliance Methods:

Compliance with the lbs/hr emission limitation shall be determined by stack testing in accordance with the procedures in Methods 1 thru 4 and 5A of 40 CFR Part 60, Appendix A. As long as the permittee is in compliance with the operational requirements specified in A.II.3, ongoing compliance with the lbs/hr emission limitation is ensured after the stack testing is conducted above. Compliance with tons per year summation limitation based upon a rolling, 12-month can be ensured by compliance with the lbs/hr limitation and the annual throughput limitation based upon a rolling, 12-month summation in term A.II.1.

c. Emissions Limitations:

0.60 kilograms of particulate/megagram of asphalt charged to the still (1.2 lbs/ton)

0.67 kilograms of particulate/megagram of asphalt charged to the still when a catalyst is added to the still (1.3 lbs/ton)-10

Applicable Compliance Methods:

Compliance with the emissions limitations shall be determined by stack testing in accordance with the procedures in Methods 1 thru 4, 5 and 5A of 40 CFR Part 60, Appendix A.

d. Emissions Limitations:

23.25 lbs/hr of SO₂

65.38 tons per year of SO₂, based upon a the rolling, 12-month summation.

Applicable Compliance Methods:

The lbs/hr emission limitation was based on the emission unit's potential to emit. The production information used to generate the lbs/hr emission calculations is confidential. Therefore, no detailed emission calculations can be provided. As long as the permittee is in compliance with the operational requirements specified in A.II.3, compliance with the lbs/hr emission limitation is ensured. Compliance with tons per year limitation based upon a the rolling, 12-month summation can be ensured by compliance with the lbs/hr limitation and the annual throughput limitation based upon a the rolling, 12-month summation.

If required, compliance shall be determined using the following methods:

Methods 1 thru 4 and 6 of 40 CFR Part 60, Appendix A.

e. Emissions Limitations:

15.13 lbs/hr of CO

66.62 tons/yr of CO, based upon a the rolling, 12-month summation.

Applicable Compliance Methods:

The lbs/hr emission limitation was based on the emission unit's potential to emit. The production information used to generate the lbs/hr emission calculation is confidential. Therefore, no detailed emission calculation can be provided. As long as the permittee is in compliance with the operational requirements specified in A.II.3, compliance with the lbs/hr emission limitation is ensured. Compliance with tons per year limitation based upon a the rolling, 12-month summation can be ensured by compliance with the lbs/hr limitation and the annual throughput limitation based upon a the rolling, 12-month summation.

If required, compliance shall be determined using the following methods:

72

Owen:

PTI A

Emissions Unit ID: P003

Issued: To be entered upon final issuance

Methods 1 thru 4 and 10 or 10B of 40 CFR Part 60, Appendix A.

Issued: To be entered upon final issuance

f. Emissions Limitations:

2.47 lbs/hr of NO_x
10.80 tons per year of NO_x

Applicable Compliance Methods:

The lbs/hr emission limitation was based on the emission unit's potential to emit. The production information used to generate the lb/hr emission calculation is confidential. Therefore, no detailed emission calculation can be provided. As long as the permittee is in compliance with the operational requirements specified in A.II.1, compliance with the lbs/hr emission limitation is ensured. Compliance with tons per year limitation can be ensured by compliance with the lbs/hr limitation and the annual throughput limitation

If required, compliance shall be determined using the following methods:

Methods 1 thru 4 and 7 of 40 CFR Part 60, Appendix A.

g. Emissions Limitations:

1.74 lbs/hr of VOC
7.61 tons per year of VOC, based upon a the rolling, 12-month summation.

Applicable Compliance Methods:

The lbs/hr emission limitation was based on the emission unit's potential to emit. The production information used to generate the lbs/hr emission calculation is confidential. Therefore, no detailed emission calculation can be provided. As long as the permittee is in compliance with the operational requirements specified in A.II.3, compliance with the lbs/hr emission limitation is ensured. Compliance with tons per year limitation based upon a the rolling, 12-month summation can be ensured by compliance with the lbs/hr limitation and the annual throughput limitation based upon a the rolling, 12-month summation.

If required, compliance shall be determined using the following method:

Method 1 thru 4 and 18 or 25 of 40 CFR Part 60, Appendix A.

h. Emissions Limitations:

0.15 lb/hr of H₂S

74

Owen:

PTI A

Emissions Unit ID: P003

Issued: To be entered upon final issuance

0.67 ton per year of H₂S, based upon a the rolling, 12-month summation.

Issued: To be entered upon final issuance

Applicable Compliance Methods:

The lb/hr emission limitation was based on the emission unit's potential to emit. The production information used to generate the lb/hr emission calculation is confidential. Therefore, no detailed emission calculation can be provided. As long as the permittee is in compliance with the operational requirements specified in A.II.1, compliance with the lb/hr emission limitations is ensured. Compliance with ton per year limitation based upon a the rolling, 12-month summation can be ensured by compliance with the lb/hr limitation and the annual throughput limitation based upon a the rolling, 12-month summation.

If required, compliance shall be determined using the following methods:

Methods 1 thru 4 and 15 of 40 CFR Part 60, Appendix A.

i. Emissions Limitations:

9.18E-04 lb/hr of lead
4.02E-03 ton per year of lead

Applicable Compliance Methods:

The lb/hr emission limitation was based on the emission unit's potential to emit. The production information used to generate the lb/hr emission calculation is confidential. Therefore, no detailed emission calculation can be provided. As long as the permittee is in compliance with the operational requirements specified in A.II.1, compliance with the lb/hr emission limitation is ensured. Compliance with ton per year limitation can be ensured by compliance with the lb/hr limitation and the annual throughput limitation

If required, compliance shall be determined using the following methods:

Methods 1 thru 4 and 15 of 40 CFR Part 60, Appendix A.

j. Emissions Limitations:

0.15 lb/hr of PM (products of combustion from incinerator)
0.64 ton per year of PM

Applicable Compliance Methods:

Compliance with the lb/hr emission limitation shall be determined by multiplying the maximum input capacity (10.2 MMBtu/hr) by the AP-42 emission factor for the

Emissions Unit ID: P003

combustion of fuel oil. Compliance with the annual emission limitation shall be determined by multiplying the short term limitation by 8760 hours per year and dividing by 2000 to convert to ton per year.

k. Emissions Limitations:

0.84 lb/hr of CO (products of combustion from incinerator)
3.68 tons per year of CO

Applicable Compliance Methods:

Compliance with the lb/hr emission limitation shall be determined by multiplying the maximum input capacity (10.2 MMBtu/hr) by the AP-42 emission factor for the combustion of natural gas. Compliance with the annual emission limitation shall be determined by multiplying the short term limitation by 8760 hours per year and dividing by 2000 to convert to tons per year.

l. Emissions Limitations:

3.13 lbs/hr of SO₂ (products of combustion from incinerator)
13.69 tons per year of SO₂

Applicable Compliance Methods:

Compliance with the lbs/hr emission limitation shall be determined by multiplying the maximum input capacity (10.2 MMBtu/hr) by the AP-42 emission factor for the combustion of fuel oil. Compliance with the annual emission limitation shall be determined by multiplying the short term limitation by 8760 hours per year and dividing by 2000 to convert to tons per year.

m. Emissions Limitations:

0.05 lb/hr of VOC (products of combustion from incinerator)
0.24 ton per year of VOC

Applicable Compliance Methods:

Compliance with the lb/hr emission limitation shall be determined by multiplying the maximum input capacity (10.2 MMBtu/hr) by the AP-42 emission factor for the combustion of natural gas. Compliance with the annual emission limitation shall be determined by multiplying the short term limitation by 8760 hours per year and dividing by 2000 to convert to ton per year.

n. Emissions Limitations:

77

Owen

PTI A

Issued: To be entered upon final issuance

Emissions Unit ID: P003

1.47 lbs/hr of NO_x (products of combustion from incinerator)
6.43 tons per year of NO_x

Issued: To be entered upon final issuance

Applicable Compliance Methods:

Compliance with the lbs/hr emission limitation shall be determined by multiplying the maximum input capacity (10.2 MMBtu/hr) by the AP-42 emission factor for the combustion of fuel oil. Compliance with the annual emission limitation shall be determined by multiplying the short term limitation by 8760 hours per year and dividing by 2000 to convert to tons per year.

o. Operational Limitation:

The total annual combined asphalt production rate from emission units P003, P006, and P007 shall not exceed 395,312 tons per year, as a rolling, 12-month summation.

Applicable Compliance Method:

Record keeping requirements in term A.III.4.

VI. Miscellaneous Requirements

1. The following terms and conditions of this permit are federally enforceable: A.I through A.V.

Owen
PTI A

Emissions Unit ID: P003

Issued: To be entered upon final issuance

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>
P003 - Converter #2 - asphalt blowing still with thermal incinerator - Modification	OAC rule 3745-31-05	None

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Record keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

80

Owens Corning Medina Roofing Plant

PTI Application: 16-02347

Issued

Facility ID: 1652050040

Emissions Unit ID: P003

Owen
PTI A

Emissions Unit ID: P006

Issued: To be entered upon final issuance

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>
P006 - Converter #4 - asphalt blowing still with a PCC thermal incinerator - Modification	OAC rule 3745-31-05(A)(3)

Owen:
PTI A

Emissions Unit ID: P006

Issued: To be entered upon final issuance

		<p>Applicable Emissions <u>Limitations/Control Measures</u></p>
		<p>The requirements of this rule also include compliance with the requirements of OAC rules, 3745-23-06, 3745-31- (13) thru (20), 3745-31-05(C) , 40 CFR Part 60, Subpart UU, and 40 CFR Part 63, Subpart LLLLL.</p>
	<p>OAC rule 3745-31-05(C)</p>	<p>Particulate matter (PM) and particulate matter less than ten microns in diameter (PM-10) emissions shall not exceed 3.57 lbs/hr.</p> <p>Nitrogen oxides (NO_x) emissions shall not exceed 2.85 lbs/hr and 12.49 tons per year.</p> <p>Hydrogen chloride (HCl) emissions shall not exceed 3.58 lbs/hr and 16.44 tons per year.</p>
	<p>40 CFR Part 60, Subpart UU</p>	<p>Hydrogen sulfides (H₂S) emissions shall not exceed 0.18 lb/hr.</p> <p>Lead (Pb) emissions shall not exceed 1.06E-03 lb/hr and 4.66E-03 ton per year.</p> <p>Sulfur dioxide (SO₂) emissions shall not exceed 26.93 lbs/hr.</p>
<p>OAC rule 3745-17-07(A) OAC rule 3745-17-11 OAC rule 3745-18-06</p>		<p>Carbon monoxide (CO) emissions shall not exceed 17.32 lbs/hr.</p>
	<p>OAC rule 3745-23-06</p>	<p>Volatile organic compound (VOC) emissions shall not exceed 2.00 lbs/hr.</p>
	<p>OAC rule 3745-31- (13) thru (20)</p>	<p>The hourly and annual emission limitations outlined are based upon the emission unit's Potential to Emit (PTE).</p>

Owen:

PTI A

Emissions Unit ID: P006

Issued: To be entered upon final issuance

Therefore, no hourly or annual records are required to demonstrate compliance with these limitations.

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

The overall control efficiency shall not be less than 95% for PM/PM-10 and H₂S.

PM emissions from the natural gas combustion of the PCC incinerator controlling emissions units J005, P006 - P007, T027, T030, and T035 shall not exceed 0.17 pound per hour and 0.76 ton per year.

NO_x emissions from the natural gas combustion of the PCC incinerator controlling emissions units J005, P006 - P007, T027, T030, and T035 shall not exceed 1.72 pounds per hour and 7.56 tons per year.

SO₂ emissions from the natural gas combustion of the PCC incinerator controlling emissions units J005, P006 - P007, T027, T030, and T035 shall not exceed 3.68 pounds per hour and 16.11 tons per year.

CO emissions from the natural gas combustion of the PCC incinerator controlling emissions units J005, P006 - P007, T027, T030, and T035 shall not exceed 0.99 pound per hour and 4.33 tons per year.

OC emissions from the natural gas combustion of the PCC incinerator controlling J005, P006 - P007, T027, T030, and T035 shall not exceed 0.06 pound per hour and 0.28 ton per year.

The emissions limitations specified by these rules are less stringent than the emissions limitations established pursuant to OAC rule 3745-31-05 (A)(3).

See A.I.2.a below.

The tons per rolling 12-month period shall not exceed:

CO - 75.88
VOC - 8.77
SO₂ - 75.55

The overall control efficiency shall not be less than exceed 95% for CO and VOC.

The total annual combined asphalt production rate from emission units P003, P006, and P007 shall not exceed 395,312 tons per year, as a

rolling, 12-month summation.

The tons per rolling 12-month period shall not exceed:

15.64 tpy PM/PM-10
0.78 tpy H₂S

See A.II.3 below.

0.60 kilograms of particulate/megagram of asphalt charged to the still (1.2 lbs/ton)

0.67 kilograms of particulate/megagram of asphalt charged to the still when a catalyst is added to the still (1.3 lbs/ton)

0% opacity for the exhaust gases

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

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

The compliance date for this rule is May 1, 2006.

2. Additional Terms and Conditions

- 2.a** The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rules 3745-23-06 by committing to comply with the best available technology requirements established in Permit to Install 16-02347.

II. Operational Restrictions

1. The average combustion temperature within the thermal incinerator, for any 3-hour block of time when the emissions unit is in operation, shall not be less than 1450 degrees Fahrenheit.
2. The operating pressure range for the vacuum manifold shall be continuously maintained within a range of 2 to 8 inches of water while the emissions unit is in operation.
3. The maximum total annual asphalt processed in emissions units P003, P006 and P007, combined shall not exceed 395,312 tons per year, based upon a rolling, 12-month summation of the asphalt processed rates. The permittee has existing asphalt production records and therefore does not need to be limited to first year monthly asphalt throughput amounts.

III. Monitoring and/or Record keeping Requirements

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

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

- a. all 3-hour blocks of time during which the average combustion temperature within the fume incinerator, when the emissions unit was in operation, was less than 1450 degrees Fahrenheit; and,
 - b. a log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.
2. The permittee shall install, operate and maintain a continuous monitor and recorder which measures the pressure in the vacuum manifold while the emissions unit is in operation. The monitoring equipment and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee. Exceedance of the normal operating pressure range shall require shutdown, investigation of any problems and corrective action to enable operation in the normal range.

Issued: To be entered upon final issuance

3. The permittee shall maintain monthly records which show the date(s) and time(s) when the vacuum manifold pressure falls below normal operating levels. These records shall be kept on site and be made available to the Director, or any authorized representative of the Director, for review during normal business hours.
4. The permittee shall maintain monthly records of the following information:
 - a. the asphalt throughput rate for each month;
 - b. the rolling, 12-month summation of the asphalt monthly throughput rates;
 - c. the emission rates for PM/PM-10, H₂S, CO, VOC, and SO₂; and,
 - d. the rolling, 12-month summation of the PM/PM-10, H₂S, CO, VOC, and SO₂ emissions rates.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports which identify all 3-hour blocks of time during which the average combustion temperature within the fume incinerator does not comply with the temperature limitation specified in term A.II.1. This report shall contain, as a minimum, the date, time or occurrence, cause, explanation and corrective action taken for any temperature variations identified.
2. The permittee shall submit quarterly deviation (excursion) reports which identify:
 - a. all exceedances of the rolling, 12-month asphalt processing rate limitation in term A.II.3; and,
 - b. all exceedances of the rolling, 12-month emissions limitations.
3. The permittee shall submit quarterly deviation (excursion) reports which identify all times during which the pressure in the vacuum manifold exceeded the normal operating range. This report shall contain, as a minimum, the date, time or occurrence, cause, explanation and corrective action taken for any exceedances identified.
4. The quarterly deviation reports shall be submitted in accordance with the reporting requirements specified in Part I - General Term and Condition A.1.c of this permit
5. The permittee shall also submit annual reports which specify the total PM/PM-10, SO₂, CO, VOC, and H₂S emissions from this emissions unit for the previous calendar year. These reports

shall be submitted by January 31 of each year.

V. Testing Requirements

1. The permittee shall conduct, or have conducted, emission testing in accordance with the following requirements:
2. The emission testing shall be conducted within 6 months after issuance of the permit.
3. The emission testing shall be conducted to demonstrate compliance with the stack particulate emission limitation.
4. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): for particulates, 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.
5. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

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

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

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

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

Issued: To be entered upon final issuance

a. Emission Limitation:

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

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, except as provided under OAC rule 3745-17-07(A)(1)(b).

b. Emissions Limitations:

3.57 lbs/hr of PM/PM-10

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

Applicable Compliance Methods:

Compliance with the lbs/hr emission limitation shall be determined by stack testing in accordance with the procedures in Methods 1 thru 4 and 5A of 40 CFR Part 60, Appendix A. Compliance with tons per year limitation based upon a the rolling, 12-month summation can be ensured by compliance with the lbs/hr limitation and the annual throughput limitation based upon a the rolling, 12-month summation.

c. Emissions Limitations:

0.60 kilograms of particulate/megagram of asphalt charged to the still (1.2 lbs/ton)

0.67 kilograms of particulate/megagram of asphalt charged to the still when a catalyst is added to the still (1.3 lbs/ton)-10

Applicable Compliance Methods:

Compliance with these emissions limitations shall be determined by stack testing in accordance with the procedures in Methods 1 thru 4, and 5A of 40 CFR Part 60, Appendix A.

d. Emissions Limitations:

26.93 lbs/hr of SO₂

75.55 tons per year of SO₂, based upon a rolling, 12-month summation

Applicable Compliance Methods:

The lbs/hr emission limitation was based on the emission unit's potential to emit. The production information used to generate the lbs/hr emission calculation is confidential. Therefore, no detailed emission calculation can be provided. As long as the permittee is in compliance with the operational requirements specified in A.II.3, compliance with the lbs/hr emission limitation is ensured. Compliance with tons per year limitation based upon a rolling, 12-month summation can be ensured by compliance with the lbs/hr limitation and the annual throughput limitation based upon a rolling, 12-month summation.

If required, compliance shall be determined using the following methods:

Methods 1 thru 4 and 6 of 40 CFR Part 60, Appendix A.

e. Emissions Limitations:

17.32 lbs/hr of CO

75.88 tons per year of CO, based upon a rolling, 12-month summation

Applicable Compliance Methods:

The lbs/hr emission limitation was based on the emission unit's potential to emit. The production information used to generate the lb/hr emission calculation is confidential. Therefore, no detailed emission calculation can be provided. As long as the permittee is in compliance with the operational requirements specified in A.II.3, compliance with the lbs/hr emission limitation is ensured. Compliance with tons per year limitation based upon a rolling, 12-month summation can be ensured by compliance with the lbs/hr limitation and the annual throughput limitation based upon a rolling, 12-month summation.

If required, compliance shall be determined using the following methods:

Methods 1 thru 4 and 10 or 10B of 40 CFR Part 60, Appendix A.

Issued: To be entered upon final issuance

f. Emissions Limitations:

2.85 lbs/hr of NO_x
12.49 tons per year of NO_x

Applicable Compliance Methods:

The lbs/hr emission limitation was based on the emission unit's potential to emit. The production information used to generate the lbs/hr emission calculation is confidential. Therefore, no detailed emission calculation can be provided. As long as the permittee is in compliance with the operational requirements specified in A.II.1, compliance with the lbs/hr emission limitation is ensured. Compliance with tons per year limitation can be ensured by compliance with the lbs/hr limitation and the annual throughput limitation

If required, compliance shall be determined using the following methods:

Methods 1 thru 4 and 7 of 40 CFR Part 60, Appendix A.

g. Emissions Limitations:

2.00 lbs/hr of VOC
8.77 tons per year of VOC, based upon a rolling, 12-month summation

Applicable Compliance Methods:

The lbs/hr emission limitation was based on the emission unit's potential to emit. The production information used to generate the lbs/hr emission calculation is confidential. Therefore, no detailed emission calculation can be provided. As long as the permittee is in compliance with the operational requirements specified in A.II.3, compliance with the lbs/hr emission limitations is ensured. Compliance with tons per year limitation based upon a rolling, 12-month summation can be ensured by compliance with the lbs/hr limitation and the annual throughput limitation based upon a rolling, 12-month summation.

If required, compliance shall be determined using the following methods:

Methods 1 thru 4 and 18 or 25 of 40 CFR Part 60, Appendix A.

h. Emissions Limitations:

0.18 lb/hr of H₂S
0.78 ton per year of H₂S, based upon a rolling, 12-month summation

90

Owens Corning Medina Roofing Plant

PTI Application: 16-02347

Issued

Facility ID: 1652050040

Emissions Unit ID: P006

Issued: To be entered upon final issuance

Applicable Compliance Methods:

The lb/hr emission limitation was based on the emission unit's potential to emit. The production information used to generate the lb/hr emission calculation is confidential. Therefore, no detailed emission calculation can be provided. As long as the permittee is in compliance with the operational requirements specified in A.II.1, compliance with the lbs/hr emission limitations is ensured. Compliance with ton per year limitation based upon a rolling, 12-month summation can be ensured by compliance with the lb/hr limitation and the annual throughput limitation based upon a rolling, 12-month summation.

If required, compliance shall be determined using the following methods:

Methods 1 thru 4 and 15 of 40 CFR Part 60, Appendix A.

i. Emissions Limitations:

1.06E-03 lb/hr of lead
4.66E-03 ton per year of lead

Applicable Compliance Methods:

The lb/hr emission limitation was based on the emission unit's potential to emit. The production information used to generate the lb/hr emission calculation is confidential. Therefore, no detailed emission calculation can be provided. As long as the permittee is in compliance with the operational requirements specified in A.II.1, compliance with the lb/hr emission limitations is ensured. Compliance with ton per year limitation can be ensured by compliance with the lb/hr limitation and the annual throughput limitation

If required, compliance shall be determined using the following methods:

Methods 1 thru 4 and 15 of 40 CFR Part 60, Appendix A.

j. Emissions Limitations:

3.58 lbs/hr of HCl
16.44 tons per year of HCl

Applicable Compliance Methods:

The lbs/hr emission limitation was based on the emission unit's potential to emit. The production information used to generate the lbs/hr emission calculation is confidential.

Issued: To be entered upon final issuance

Therefore, no detailed emission calculation can be provided. As long as the permittee is in compliance with the operational requirements specified in A.II.1, compliance with the lbs/hr emission limitations is ensured. Compliance with tons per year limitation can be ensured by compliance with the lbs/hr limitation and the annual throughput limitation

If required, compliance shall be determined using the following methods:

Methods 1 thru 4 and 12 of 40 CFR Part 60, Appendix A.

k. Emissions Limitations:

0.17 lb/hr of PM (products of combustion from incinerator)
0.76 ton per year of PM

Applicable Compliance Methods:

Compliance with the lb/hr emission limitation shall be determined by multiplying the maximum input capacity (12 MMBtu/hr) by the AP-42 emission factor for the combustion of fuel oil. Compliance with the annual emission limitation shall be determined by multiplying the short term limitation by 8760 hours per year and dividing by 2000 to convert to ton per year.

l. Emissions Limitations:

0.99 lb/hr of CO (products of combustion from incinerator)
4.33 tons per year of CO

Applicable Compliance Methods:

Compliance with the lbs/hr emission limitation shall be determined by multiplying the maximum input capacity (12 MMBtu/hr) by the AP-42 emission factor for the combustion of natural gas. Compliance with the annual emission limitation shall be determined by multiplying the short term limitation by 8760 hours per year and dividing by 2000 to convert to tons per year.

m. Emissions Limitations:

3.68 lb/hr of SO₂ (products of combustion from incinerator)
16.11 tons per year of SO₂

Applicable Compliance Methods:

Issued: To be entered upon final issuance

Compliance with the lbs/hr emission limitation shall be determined by multiplying the maximum input capacity (12 MMBtu/hr) by the AP-42 emission factor for the combustion of fuel oil. Compliance with the annual emission limitation shall be determined by multiplying the short term limitation by 8760 hours per year and dividing by 2000 to convert to tons per year.

n. Emissions Limitations:

0.06 lb/hr of VOC (products of combustion from incinerator)

0.28 ton per year of VOC

Applicable Compliance Method:

Compliance with the lb/hr emission limitation shall be determined by multiplying the maximum input capacity (12 MMBtu/hr) by the AP-42 emission factor for the combustion of natural gas. Compliance with the annual emission limitation shall be determined by multiplying the short term limitation by 8760 hours per year and dividing by 2000 to convert to ton per year.

o. Emissions Limitations:

1.72 lbs/hr of NO_x (products of combustion from incinerator)

7.56 tons per year of NO_x

Applicable Compliance Methods:

Compliance with the lbs/hr emission limitation shall be determined by multiplying the maximum input capacity (12 MMBtu/hr) by the AP-42 emission factor for the combustion of fuel oil. Compliance with the annual emission limitation shall be determined by multiplying the short term limitation by 8760 hours per year and dividing by 2000 to convert to tons per year.

p. Operational Limitation:

The total annual combined asphalt production rate from emission units P003, P006, and P007 shall not exceed 395,312 tons per year, as a rolling, 12-month summation.

Applicable Compliance Method:

Record keeping requirements in term A.III

VI. Miscellaneous Requirements

1. The following terms and conditions of this permit are federally enforceable: A.I through A.V.
2. The terms and conditions of this Permit to Install shall supersede all applicable the air pollution control requirements for this emissions unit contained in Permit to Install number 16-1622 as issued on June 2, 1997.

Owen
PTI A

Emissions Unit ID: P006

Issued: To be entered upon final issuance

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>
P006 - Converter #4 - asphalt blowing still with thermal incinerator - Modification	OAC rule 3745-31-05	None

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Record keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

96

Owen

PTI A

Issued: To be entered upon final issuance

Emissions Unit ID: P006

Owen
PTI A

Emissions Unit ID: P007

Issued: To be entered upon final issuance

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>
P007 - Converter #5 - asphalt blowing still with a PCC thermal incinerator - Modification	OAC rule 3745-31-05(A)(3)

Owen:
PTI A

Emissions Unit ID: P007

Issued: To be entered upon final issuance

		<p>Applicable Emissions <u>Limitations/Control Measures</u></p>
	OAC rule 3745-31-05(C)	<p>The requirements of this rule also include compliance with the requirements of OAC rules 3745-21-07(G), 3745-23-06, 3745-31- (13) thru (20), 3745-31-05(C), 40 CFR Part 60, Subpart UU, and 40 CFR Part 63, Subpart LLLLL.</p>
		<p>Particulate matter (PM) and particulate matter less than ten microns in diameter (PM-10) emissions shall not exceed 3.57 lbs/hr.</p>
		<p>Nitrogen oxides (NO_x) emissions shall not exceed 2.85 lbs/hr and 12.49 tons per year.</p>
	40 CFR Part 60, Subpart UU	<p>Hydrogen chloride (HCl) emissions shall not exceed 3.58 lbs/hr and 16.44 tons per year.</p>
		<p>Hydrogen sulfides (H₂S) emissions shall not exceed 0.18 lb/hr.</p>
		<p>Lead (Pb) emissions shall not exceed 1.06E-03 lb/hr and 4.66E-03 ton per year.</p>
<p>OAC rule 3745-17-07(A) OAC rule 3745-17-11 OAC rule 3745-18-06</p>	40 CFR Part 63, Subpart LLLLL	<p>Sulfur dioxide (SO₂) emissions shall not exceed 26.93 lbs/hr.</p>
<p>OAC rule 3745-23-06</p>		<p>Carbon monoxide (CO) emissions shall not exceed 17.32 lbs/hr.</p>
<p>OAC rule 3745-31- (13) thru (20)</p>		<p>Volatile organic compound (VOC) emissions shall not exceed 2.00 lbs/hr.</p>
		<p>The hourly and annual emission limitations outlined are based upon the emission unit's Potential to Emit (PTE).</p>

Owens Corning Medina Roofing Plant

PTI Application: 16-02247

Issued

Facility ID: 1652050040

Emissions Unit ID: P007

Therefore, no hourly or annual records are required to demonstrate compliance with these limitations.

Visible particulate emissions from the exhaust gases shall not exceed 0% opacity.

The overall control efficiency shall not be less than 95% for PM/PM-10 and H₂S.

PM emissions from the natural gas combustion of the PCC incinerator controlling emissions units J005, P006 - P007, T027, T030, and T035 shall not exceed 0.17 pound per hour and 0.76 ton per year.

NO_x emissions from the natural gas combustion of the PCC incinerator controlling emissions units J005, P006 - P007, T027, T030, and T035 shall not exceed 1.72 pounds per hour and 7.56 tons per year.

SO₂ emissions from the natural gas combustion of the PCC incinerator controlling emissions units J005, P006 - P007, T027, T030, and T035 shall not exceed 3.68 pounds per hour and 16.11 tons per year.

CO emissions from the natural gas combustion of the PCC incinerator

controlling emissions units J005, P006 - P007, T027, T030, and T035 shall not exceed 0.99 pound per hour and 4.33 tons per year.

OC emissions from the natural gas combustion of the PCC incinerator controlling J005, P006 - P007, T027, T030, and T035 shall not exceed 0.06 pound per hour and 0.28 ton per year.

The emissions limitations specified by these rules are less stringent than the emissions limitations established pursuant to OAC rule 3745-31-05 (A)(3).

See A.I.2.a below.

The tons per rolling 12-month period shall not exceed:

CO - 75.88
VOC - 8.77
SO₂ - 75.55

The overall control efficiency shall not be less than 95% for CO and VOC.

The total annual combined asphalt production rate from emission units P003, P006, and P007 shall not exceed 395,312 tons per year, as a rolling, 12-month summation.

The tons per rolling 12-month period shall not exceed:

15.64 tpy PM/PM-10
0.78 tpy H₂S.

See A.II.3 below.

0.60 kilograms of particulate/megagram of asphalt charged to the still (1.2 lbs/ton)

0.67 kilograms of particulate/megagram of asphalt charged to the still when a catalyst is added to the still (1.3 lbs/ton)

0% opacity for the exhaust gases

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

route the emissions to a combustion device achieving a combustion efficiency of 99.5 percent;

The compliance date for this rule is May 1, 2006.

Issued: To be entered upon final issuance**2. Additional Terms and Conditions**

- 2.a** The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rules 3745-23-06 by committing to comply with the best available technology requirements established in Permit to Install 16-02347.

II. Operational Restrictions

1. The average combustion temperature within the thermal incinerator, for any 3-hour block of time when the emissions unit is in operation, shall not be less than 1450 degrees Fahrenheit.
2. The operating pressure range for the vacuum manifold shall be continuously maintained within a range of 2 to 8 inches of water while the emissions unit is in operation.
3. The maximum total annual asphalt processed in emissions units P003, P006 and P007, combined shall not exceed 395,312 tons per year, based upon a rolling, 12-month summation of the asphalt processed rates. The permittee has existing asphalt production records and therefore does not need to be limited to first year monthly asphalt throughput amounts.

III. Monitoring and/or Record keeping Requirements

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

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

- a. all 3-hour blocks of time during which the average combustion temperature within the fume incinerator, when the emissions unit was in operation, was less than 1450 degrees Fahrenheit; and
 - b. a log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.
2. The permittee shall install, operate and maintain a continuous monitor and recorder which measures the pressure in the vacuum manifold while the emissions unit is in operation. The monitoring equipment and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary

Emissions Unit ID: P007

by the permittee. Exceedance of the normal operating pressure range shall require shutdown, investigation of any problems and corrective action to enable operation in the normal range.

3. The permittee shall maintain monthly records which show the date(s) and time(s) when the vacuum manifold pressure falls below normal operating levels. These records shall be kept on site and be made available to the Director, or any authorized representative of the Director, for review during normal business hours.
4. The permittee shall maintain monthly records of the following information:
 - a. the asphalt throughput rate for each month;
 - b. the rolling, 12-month summation of the asphalt monthly throughput rates;
 - c. the emission rates for PM/PM-10, H₂S, CO, VOC, and SO₂; and
 - d. the rolling, 12-month summation of the PM/PM-10, H₂S, CO, VOC, and SO₂ emissions rates.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports which identify all 3-hour blocks of time during which the average combustion temperature within the fume incinerator does not comply with the temperature limitation specified in term A.II.1. This report shall contain, as a minimum, the date, time or occurrence, cause, explanation and corrective action taken for any temperature variations identified.
2. The permittee shall submit quarterly deviation (excursion) reports which identify
 - a. all exceedances of the rolling, 12-month asphalt processing rate limitation in term A.II.3; and,
 - b. all exceedances of the rolling, 12-month emissions limitations.
3. The permittee shall submit quarterly deviation (excursion) reports which identify all times during which the pressure in the vacuum manifold exceeded the normal operating range. This report shall contain, as a minimum, the date, time or occurrence, cause, explanation and corrective action taken for any exceedances identified.
4. The quarterly deviation reports shall be submitted in accordance with the reporting requirements as specified in Part I - General Term and Condition A.1.c of this permit.
5. The permittee shall also submit annual reports which specify the total PM/PM-10, SO₂, CO, VOC, and H₂S emissions from this emissions unit for the previous calendar year. These reports

Issued: To be entered upon final issuance

shall be submitted by January 31 of each year.

V. Testing Requirements

1. The permittee shall conduct, or have conducted, emission testing in accordance with the following requirements:
2. The emission testing shall be conducted within 6 months after issuance of the permit.
3. The emission testing shall be conducted to demonstrate compliance with the stack particulate emission limitation.
4. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): for particulates, 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.
5. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

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

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

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

Emissions Unit ID: P007

6. Compliance with the emission limitation(s) in Section A.I of these terms and conditions shall be determined in accordance with the following method(s):

- a. Emission Limitation:

Visible particulate emission from the exhaust stack shall not exceed 0% 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, except as provided under OAC rule 3745-17-07(A)(1)(b).

- b. Emissions Limitations:

3.57 lbs/hr of PM/PM-10

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

Applicable Compliance Methods:

Compliance with the lbs/hr emission limitation shall be determined by stack testing in accordance with the procedures in Method 5A of 40 CFR Part 60, Appendix A. Compliance with tons per year limitation based upon a rolling, 12-month summation can be ensured by compliance with the lbs/hr limitation and the annual throughput limitation based upon a rolling, 12-month summation.

- c. Emissions Limitations:

0.60 kilograms of particulate/megagram of asphalt charged to the still (1.2 lbs/ton)

0.67 kilograms of particulate/megagram of asphalt charged to the still when a catalyst is added to the still (1.3 lbs/ton)-10

Applicable Compliance Methods:

Compliance with these emissions limitations shall be determined by stack testing in accordance with the procedures in Methods 1 thru 4 and 5A of 40 CFR Part 60, Appendix A.

- d. Emissions Limitations:

26.93 lbs/hr of SO₂

75.55 tons per year of SO₂ based upon a rolling, 12-month summation

Issued: To be entered upon final issuance

Applicable Compliance Methods:

The lbs/hr emission limitation was based on the emission unit's potential to emit. The production information used to generate the lbs/hr emission calculation is confidential. Therefore, no detailed emission calculation can be provided. As long as the permittee is in compliance with the operational requirements specified in A.II.3, compliance with the lbs/hr emission limitation is ensured. Compliance with tons per year limitation based upon a rolling, 12-month summation can be ensured by compliance with the lbs/hr limitation and the annual throughput limitation based upon a rolling, 12-month summation.

If required, compliance shall be determined using the following methods:

Methods 1 thru 4 and 6 of 40 CFR Part 60, Appendix A.

e. Emissions Limitations:

17.32 lbs/hr of CO

75.88 tons per year of CO based upon a rolling, 12-month summation

Applicable Compliance Methods:

The lbs/hr emission limitation was based on the emission unit's potential to emit. The production information used to generate the lbs/hr emission calculation is confidential. Therefore, no detailed emission calculation can be provided. As long as the permittee is in compliance with the operational requirements specified in A.II.3, compliance with the lbs/hr emission limitation is ensured. Compliance with tons per year limitation based upon a rolling, 12-month summation can be ensured by compliance with the lbs/hr limitation and the annual throughput limitation based upon a rolling, 12-month summation.

If required, compliance shall be determined using the following methods:

Methods 1 thru 4 and 10 or 10B of 40 CFR Part 60, Appendix A.

f. Emissions Limitations:

2.85 lbs/hr of NO_x

12.49 tons per year of NO_x

Applicable Compliance Methods:

Emissions Unit ID: P007

The lbs/hr emission limitation was based on the emission unit's potential to emit. The production information used to generate the lbs/hr emission calculation is confidential. Therefore, no detailed emission calculation can be provided. As long as the permittee is in compliance with the operational requirements specified in A.II.1, compliance with the lbs/hr emission limitations is ensured. Compliance with tons per year limitation can be ensured by compliance with the lbs/hr limitation and the annual throughput limitation.

If required, compliance shall be determined using the following methods:

Methods 1 thru 4 and 7 of 40 CFR Part 60, Appendix A.

g. Emissions Limitations:

2.00 lbs/hr of VOC

8.77 tons per year of VOC, based upon a rolling, 12-month summation

Applicable Compliance Methods:

The lbs/hr emission limitation was based on the emission unit's potential to emit. The production information used to generate the lbs/hr emission calculation is confidential. Therefore, no detailed emission calculation can be provided. As long as the permittee is in compliance with the operational requirements specified in A.II.3, compliance with the lbs/hr emission limitation is ensured. Compliance with tons per year limitation based upon a rolling, 12-month summation can be ensured by compliance with the lbs/hr limitation and the annual throughput limitation based upon a rolling, 12-month summation.

If required, compliance shall be determined using the following methods:

Methods 1 thru 4 and 18 or 25 of 40 CFR Part 60, Appendix A.

h. Emissions Limitations:

0.18 lb/hr of H₂S

0.78 ton per year of H₂S, based upon a rolling, 12-month summation

Applicable Compliance Methods:

The lb/hr emission limitation was based on the emission unit's potential to emit. The production information used to generate the lb/hr emission calculation is confidential. Therefore, no detailed emission calculation can be provided. As long as the permittee is in compliance with the operational requirements specified in A.II.1, compliance with the lb/hr emission limitations is ensured. Compliance with tons per year limitation based upon a rolling, 12-month summation can be ensured by compliance with the lbs/hr limitation and the annual throughput limitation based upon a rolling, 12-month summation.

Issued: To be entered upon final issuance

If required, compliance shall be determined using the following methods:

Methods 1 thru 4 and 15 of 40 CFR Part 60, Appendix A.

i. Emissions Limitations:

1.06E-03 lb/hr of lead
4.66E-03 ton per year of lead

Applicable Compliance Methods:

The lb/hr emission limitation was based on the emission unit's potential to emit. The production information used to generate the lb/hr emission calculation is confidential. Therefore, no detailed emission calculation can be provided. As long as the permittee is in compliance with the operational requirements specified in A.II.1, compliance with the lb/hr emission limitations is ensured. Compliance with ton per year limitation can be ensured by compliance with the lb/hr limitation and the annual throughput limitation.

If required, compliance shall be determined using the following methods:

Methods 1 thru 4 and 15 of 40 CFR Part 60, Appendix A.

j. Emissions Limitations:

3.58 lbs/hr of HCl
16.44 tons per year of HCl

Applicable Compliance Methods:

The lbs/hr emission limitation was based on the emission unit's potential to emit. The production information used to generate the lbs/hr emission calculation is confidential. Therefore, no detailed emission calculation can be provided. As long as the permittee is in compliance with the operational requirements specified in A.II.1, compliance with the lbs/hr emission limitations is ensured. Compliance with tons per year limitation can be ensured by compliance with the lbs/hr limitation and the annual throughput limitation.

If required, compliance shall be determined using the following methods:

Methods 1 thru 4 and 12 of 40 CFR Part 60, Appendix A.

k. Emissions Limitations:

0.17 lb/hr of PM (products of combustion from incinerator)

0.76 ton per year of PM

Applicable Compliance Methods:

Compliance with the lb/hr emission limitation shall be determined by multiplying the maximum input capacity (12 MMBtu/hr) by the AP-42 emission factor for the combustion of fuel oil. Compliance with the annual emission limitation shall be determined by multiplying the short term limitation by 8760 hours per year and dividing by 2000 to convert to ton per year.

l. Emissions Limitations:

0.99 lb/hr of CO (products of combustion from incinerator)

4.33 tons per year of CO

Applicable Compliance Methods:

Compliance with the lb/hr emission limitation shall be determined by multiplying the maximum input capacity (12 MMBtu/hr) by the AP-42 emission factor for the combustion of natural gas. Compliance with the annual emission limitation shall be determined by multiplying the short term limitation by 8760 hours per year and dividing by 2000 to convert to tons per year.

m. Emissions Limitations:

3.68 lb/hr of SO₂ (products of combustion from incinerator)

16.11 tons per year of SO₂

Applicable Compliance Method:

Compliance with the lbs/hr emission limitation shall be determined by multiplying the maximum input capacity (12 MMBtu/hr) by the AP-42 emission factor for the combustion of fuel oil. Compliance with the annual emission limitation shall be determined by multiplying the short term limitation by 8760 hours per year and dividing by 2000 to convert to tons per year.

n. Emissions Limitations:

0.06 lb/hr of VOC (products of combustion from incinerator)

0.28 ton per year of VOC

Owen:

PTI A

Emissions Unit ID: P007

Issued: To be entered upon final issuance

Applicable Compliance Methods:

Compliance with the lb/hr emission limitation shall be determined by multiplying the maximum input capacity (12 MMBtu/hr) by the AP-42 emission factor for the combustion of natural gas. Compliance with the annual emission limitation shall be determined by multiplying the short term limitation by 8760 hours per year and dividing by 2000 to convert to ton per year.

Issued: To be entered upon final issuance

o. Emission Limitation:

1.72 lbs/hr of NO_x (products of combustion from incinerator)
7.56 tons per year of NO_x

Applicable Compliance Methods:

Compliance with the lbs/hr emission limitation shall be determined by multiplying the maximum input capacity (12 MMBtu/hr) by the AP-42 emission factor for the combustion of fuel oil. Compliance with the annual emission limitation shall be determined by multiplying the short term limitation by 8760 hours per year and dividing by 2000 to convert to tons per year.

p. Operational Limitation:

The total annual combined asphalt production rate from emission units P003, P006, and P007 shall not exceed 395,312 tons per year, as a rolling, 12-month summation.

Applicable Compliance Method:

Record keeping requirements in term A.III

VI. Miscellaneous Requirements

1. The following terms and conditions of this permit are federally enforceable: A.I through A.V.
2. The terms and conditions of this Permit to Install shall supersede all applicable the air pollution control requirements for this emissions unit contained in Permit to Install number 16-1622 as issued on June 2, 1997.

Owen
PTI A

Emissions Unit ID: P007

Issued: To be entered upon final issuance

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>
P007 - Converter #5 - asphalt blowing still with thermal incinerator - Modification	OAC rule 3745-31-05	None

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Record keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

111

Owens Corning Medina Roofing Plant

PTI Application: 16-03347

Issued

Facility ID: 1652050040

Emissions Unit ID: P007

None

Owen
PTI A

Emissions Unit ID: P902

Issued: To be entered upon final issuance

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 3745-17-07(B) OAC rule 3745-17-11
P902 - Mineral Filler Handling System #1 - Filler Upper Surge Bin #1, Filler Lower Surge Bin #1, and Filler Heater #1 Controlled with Dust Collectors (Serves 4-Wide Roofing Line)	OAC rule 3745-31-05(A)(3)	OAC rule 3745-17-08(B)
		OAC rule 3745-31-05(C)
		40 CFR Part 60, Subpart UU

Owen:

PTI A

Emissions Unit ID: P902

Issued: To be entered upon final issuanceApplicable Emissions
Limitations/Control
Measures

The requirements of this rule also include compliance with the requirements of OAC rules OAC rule 3745-17-08(B), 3745-31-05(C)(5), and 40 CFR Part 60, Subpart UU.

Particulate matter (PM) and particulate matter less than ten microns in diameter (PM-10) shall not exceed:

0.30 lb/hr (Combined Stack Emissions);

0.20 lb/hr PM/PM-10 (Upper Surge Bin #1 Dust Collector Stack); and,

0.10 lb/hr PM/PM-10 (Filler Heater #1 Dust Collector Stack).

The hourly emission limitations outlined are based upon the emission unit's Potential to Emit (PTE). Therefore, no hourly records are required to demonstrate compliance with these limitations.

The control efficiency shall not be less than 99% for PM/PM-10.

The emissions limitations specified by these rules are less stringent than the emissions limitations established pursuant to OAC rule 3745-31-05(A)(3) and 40 CFR Part 60, Subpart UU.

The use bin shall be adequately enclosed and vented to a baghouse.

Annual operating hours shall be limited to 8,250 hours per year based on a rolling 12-month summation.

The tons per rolling 12-month period shall not exceed:

1.23 tons per year of PM/PM -10

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

Issued: To be entered upon final issuance**2. Additional Terms and Conditions****2.a** None**II. Operational Restrictions**

1. The maximum annual operating hours for this emissions unit shall not exceed 8,250 hours per year, based upon a rolling, 12-month summation of the operating hours. The permittee has existing operation records and therefore does not need to be limited to first year monthly operating hours amounts.
2. The pressure drop across the baghouse shall be maintained within the range of 0.5 to 5.0 inches of water while the emissions unit is in operation.

III. Monitoring and/or Record keeping Requirements

1. The permittee shall maintain monthly records of the following information:
 - a. the operating hours for each month;
 - b. the PM/PM-10 emissions for each month;
 - c. the rolling, 12-month summation of the operating hours; and
 - d. the rolling, 12-month summation of PM/PM-10 emissions.
2. The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on daily basis.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports which identify:
 - a. all exceedances of the rolling, 12-month operating hours limitation; and
 - b. all exceedances of the rolling, 12-month PM/PM-10 emissions limitations.
2. The permittee shall submit pressure drop quarterly deviation (excursion) reports that identify that

Emissions Unit ID: P902

all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.

3. The quarterly deviation reports are due by the date described in Part 1 - General Terms and Conditions of this permit under section (A)(1).
4. The permittee shall also submit annual reports which specify the total PM/PM-10 emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.

V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.1 of these terms and conditions shall be determined in accordance with the following method(s):

- a. Emission Limitation:

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

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, except as provided under OAC rule 3745-17-07(A)(1)(b).

- b. Emissions Limitations:

0.30 lb/hr of PM/PM-10 (Combined Stack Emissions).

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

0.20 lb/hr PM/PM-10 (Upper Surge Bin #1 Dust Collector Stack).

0.10 lb/hr PM/PM-10 (Filler Heater #1 Dust Collector Stack).

Applicable Compliance Methods:

The lb/hr emission limitation was based on the emission unit's potential to emit. The production information used to generate the lb/hr emission calculation is confidential. Therefore, no detailed emission calculation can be provided. Compliance with tons per year limitation based upon a rolling 12-month summation of the monthly emissions can be demonstrated by multiplying the maximum hourly limitation by 8,250 (annual hour of operation limitation) and divide by 2000 to convert the results to tons per year.

Issued: To be entered upon final issuance

If required, compliance shall be determined using the following methods:

For PM, Methods 1 thru 4 and 5A of 40 CFR Part 60, Appendix A.

For PM-10, Methods 1 thru 4 and 201 of 40 CFR Part 51, Appendix M.

c. Operational Limitation:

8,250 hours per year, based upon a rolling, 12-month summation of the operating hours.

Applicable Compliance Method:

Record keeping requirements in term A.III.1.

VI. Miscellaneous Requirements

1. The following terms and conditions of this permit are federally enforceable: A.I through A.V.

Owen
PTI A

Emissions Unit ID: P902

Issued: To be entered upon final issuance

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>
P902 - Mineral Filler Handling System #1 - Filler Upper Surge Bin #1, Filler Lower Surge Bun #1, and Filler Heater #1 Controlled with Dust Collectors (Serves 4-Wide Roofing Line)	OAC rule 3745-31-05	None

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Record keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

118

Owens Corning Medina Roofing Plant

PTI Application: 16-02347

Issued

Facility ID: 1652050040

Emissions Unit ID: P902

VI. Miscellaneous Requirements

None

Issued: To be entered upon final issuance

	Applicable Emissions Limitations/Control Measures	
OAC rule 3745-31-05(C)	The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-08, 3745-31- (13) thru (20), 3745-31-05(C), 40 CFR Part 60, Subpart UU, and 40 CFR Part 63, Subpart LLLLL.	exceed 10% opacity as a 6-minute average (stack emissions). Visible particulate emissions shall not exceed 10% opacity as a 3-minute average (fugitive emissions). The emissions limitations specified by these rules are less stringent than the emissions limitations established pursuant to OAC rule 3745-31-05 (A)(3) and 40 CFR Part 60, Subpart UU.
40 CFR Part 60, Subpart UU	Particulate matter (PM) and particulate matter less than ten microns in diameter (PM-10) shall not exceed 2.60 lbs/hr.	The saturator shall be adequately enclosed and vented to a baghouse.
	Hydrogen sulfides (H ₂ S) emissions shall not exceed 0.18 lb/hr.	The tons per rolling 12-month period shall not exceed:
	Volatile organic compound (VOC) emissions shall not exceed 4.62 lbs/hr.	VOC - 14.75 CO - 17.59 SO ₂ - 0.62
40 CFR Part 63, Subpart LLLLL	Carbon monoxide (CO) emissions shall not exceed 5.51 lbs/hr.	Annual operating hours shall be limited to 8,250 hours per year based on a rolling 12-month summation.
	Sulfur dioxide (SO ₂) shall not exceed 0.17 lb/hr SO ₂ . The hourly emission limitations outlined are based upon the emission unit's Potential to Emit (PTE). Therefore, no hourly records are required to demonstrate compliance with these limitations. The control efficiency shall not be less than 99% for PM/PM-10 and H ₂ S. Visible particulate emissions shall not	The tons per rolling 12-month period shall not exceed: 8.29 tpy PM/PM-10 0.63 tpy H ₂ S. For saturator: 0.04 kilogram of particulates per megagram of asphalt shingle. No visible emissions from the saturator capture system for more than 20 percent of any period of consecutive valid

Owen:

PTI A

Emissions Unit ID: P906

Issued: To be entered upon final issuance

observations totaling 60 minutes.

Limit particulate emissions to 0.04 kilograms emissions per megagram (kg/Mg) (0.08 pounds per ton, lb/ton) of asphalt shingle or mineral-surfaced roll roofing produced.

The compliance date for this rule is May 1, 2006.

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

1. The maximum annual operating hours for this emissions unit shall not exceed 8,250 hours per year, based upon a rolling, 12-month summation of the operating hours. The permittee has existing operation records and therefore does not need to be limited to the first year monthly operating hours amounts.
2. The pressure drop across the baghouse shall be maintained within the range of 0.5 to 5.0 inches of water while the emissions unit is in operation.

III. Monitoring and/or Record keeping Requirements

1. The permittee shall maintain monthly records of the following information for this emission unit.
 - a. the operating hours for each month;
 - b. the PM/PM-10, H₂S, SO₂, CO, and VOC emissions for each month;
 - c. the rolling, 12-month summation of the operating hours; and
 - d. the rolling, 12-month summation of PM/PM-10, H₂S, SO₂, CO, and VOC emissions.
2. The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop

Emissions Unit ID: P906

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

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports which identify:
 - a. all exceedances of the rolling, 12-month operating hours limitations; and
 - b. all exceedances of the rolling, 12-month PM/PM-10, H₂S, SO₂, CO, and VOC emissions limitations.
2. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify that all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.
3. The quarterly deviation reports are due by the date described in Part 1 - General Terms and Conditions of this permit under section (A)(1).
4. The permittee shall also submit annual reports which specify the total PM/PM-10, H₂S, SO₂, CO, and VOC emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.

V. Testing Requirements

1. The permittee shall conduct, or have conducted, emission testing in accordance with the following requirements:
2. The emission testing shall be conducted within 6 months after issuance of the permit.
3. The emission testing shall be conducted to demonstrate compliance with the stack particulate emission limitation.
4. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): for particulates, 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.
5. 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.

Owen

PTI A

Emissions Unit ID: P906

Issued: To be entered upon final issuance

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).

Issued: To be entered upon final issuance

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

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

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

a. Emission Limitation:

Visible particulate emissions shall not exceed 10% opacity as a 6-minute average (stack emissions).

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, except as provided under OAC rule 3745-17-07(A)(1)(b).

b. Emissions Limitations:

Visible particulate emissions shall not exceed 10% opacity as a 3-minute average (fugitive emissions).

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

Applicable compliance methods:

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

c. Emissions Limitations:

2.60 lbs/hr of PM/PM-10

Emissions Unit ID: P906

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

0.04 kilogram of particulates per megagram of asphalt shingle

Applicable Compliance Methods:

Compliance of the lbs/hr and kilogram of particulates per megagram of asphalt shingle shall be determined using Methods 1 thru 5 of 40 CFR Part 60, Appendix A.

Compliance with tons per year limitation based upon a rolling, 12-month summation of the monthly emissions can be demonstrated by multiplying the maximum hourly limitation by 8,250 (annual hour of operation limitation) and divide by 2000 to convert the results to tons per year.

d. Emissions Limitations:

0.17 lb/hr of SO₂

0.62 ton per year of SO₂, based upon a rolling, 12-month summation of the monthly emissions.

Applicable Compliance Methods:

The lb/hr emission limitation was based on the emission unit's potential to emit. The production information used to generate the lb/hr emission calculation is confidential. Therefore, no detailed emission calculation can be provided. Compliance with ton per year limitation based upon a rolling, 12-month summation of the monthly emissions can be demonstrated by multiplying the maximum hourly limitation by 8,250 (annual hour of operation limitation) and divide by 2000 to convert the results to ton per year.

If required, compliance shall be determined using the following methods:

Methods 1 thru 4 and 6 of 40 CFR Part 60, Appendix A.

e. Emissions 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:

The lbs/hr emission limitation was based on the emission unit's potential to emit. The production information used to generate the lbs/hr emission calculation is confidential. Therefore, no detailed emission calculation can be provided. Compliance with tons per

126

Owen:

PTI A

Emissions Unit ID: P906

Issued: To be entered upon final issuance

year limitation based upon a rolling, 12-month summation of the monthly emissions can be demonstrated by multiplying the maximum hourly limitation by 8,250 (annual hour of operation limitation) and divide by 2000 to convert the results to tons per year.

Issued: To be entered upon final issuance

If required, compliance shall be determined using the following methods:

Methods 1 thru 4 and 10 or 10B of 40 CFR Part 60, Appendix A.

f. Emissions 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:

The lbs/hr emission limitation was based on the emission unit's potential to emit. The production information used to generate the lb/hr emission calculation is confidential. Therefore, no detailed emission calculation can be provided. Compliance with tons per year limitation based upon a rolling, 12-month summation of the monthly emissions can be demonstrated by multiplying the maximum hourly limitation by 8,250 (annual hour of operation limitation) and divide by 2000 to convert the results to tons per year.

If required, compliance shall be determined using the following methods:

Methods 1 thru 4 and 18 or 25 of 40 CFR Part 60, Appendix A.

g. Emissions Limitations:

0.18 lb/hr H₂S

0.63 ton per year of H₂S based upon a rolling, 12-month summation

Applicable Compliance Methods:

The lb/hr emission limitation was based on the emission unit's potential to emit. The production information used to generate the lb/hr emission calculation is confidential. Therefore, no detailed emission calculation can be provided. Compliance with ton per year limitation based upon a rolling, 12-month summation of the monthly emissions can be demonstrated by multiplying the maximum hourly limitation by 8,250 (annual hour of operation limitation) and divide by 2000 to convert the results to ton per year.

If required, compliance shall be determined using the following methods:

Methods 1 thru 4 and 15 of 40 CFR Part 60, Appendix A.

h. Operational Limitation:

128

Owens Corning Medina Roofing Plant

PTI Application: 16-02347

Issued

Facility ID: 1652050040

Emissions Unit ID: P906

8,250 hours per year, based upon a rolling, 12-month summation of the operating hours.

Owen

PTI A

Emissions Unit ID: P906

Issued: To be entered upon final issuance

Applicable Compliance Method:

Record keeping requirements in term A.III.1.

VI. Miscellaneous Requirements

1. The following terms and conditions of this permit are federally enforceable: A.I through A.V.

Owen
PTI A

Emissions Unit ID: P906

Issued: To be entered upon final issuance

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 baghouse (serves 3-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 Record keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

131

Owen

PTI A

Issued: To be entered upon final issuance

Emissions Unit ID: P906

Issued: To be entered upon final issuance

	Applicable Emissions Limitations/Control Measures	
OAC rule 3745-31-05(C)	The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-08, 3745-31- (13) thru (20), 3745-31-05(C), 40 CFR Part 60, Subpart UU, and 40 CFR Part 63, Subpart LLLLL.	exceed 10% opacity as a 6-minute average (stack emissions) Visible particulate emissions shall not exceed 10% opacity as a 3-minute average (fugitive emissions) The emission limitation specified by these rules are less stringent than the emissions limitations established pursuant to OAC rule 3745-31-05 (A)(3) and 40 CFR Part 60, Subpart UU.
40 CFR Part 60, Subpart UU	Particulate matter (PM) and particulate matter less than ten microns in diameter (PM-10) shall not exceed 3.70 lbs/hr.	The saturator shall be adequately enclosed and vented to a baghouse.
	Hydrogen sulfides (H ₂ S) emissions shall not exceed 0.26 lb/hr.	The tons per rolling 12-month period shall not exceed:
	Volatile organic compound (VOC) emissions shall not exceed 6.59 lbs/hr.	VOC - 25.16 CO - 30.01 SO ₂ - 1.00
40 CFR Part 63, Subpart LLLLL	Carbon monoxide (CO) emissions shall not exceed 7.86 lbs/hr.	Annual operating hours shall be limited to 8,250 hours per year based on a rolling 12-month summation.
	Sulfur dioxide (SO ₂) shall not exceed 0.25 lb/hr.	The tons per rolling 12-month period shall not exceed:
	The hourly emission limitations outlined are based upon the emission unit's Potential to Emit (PTE). Therefore, no hourly records are required to demonstrate compliance with these limitations.	14.15 tpy PM/PM-10 1.03 tpy H ₂ S For saturator: 0.04 kilogram of particulates per megagram of asphalt shingle.
	The control efficiency shall not be less than 99% for PM/PM-10 and H ₂ S.	No visible emissions from the saturator capture system for more than 20 percent of any period of consecutive valid
	Visible particulate emissions shall not	

Issued

Emissions Unit ID: P908

observations totaling 60 minutes

Limit particulate emissions to 0.04 kilograms emissions per megagram (kg/Mg) (0.08 pounds per ton, lb/ton) of asphalt shingle or mineral-surfaced roll roofing produced.

The compliance date for this rule is May 1, 2006.

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

1. The maximum annual operating hours for this emissions unit shall not exceed 8,250 hours per year, based upon a rolling, 12-month summation of the operating hours. The permittee has existing operation records and therefore does not need to be limited to first year monthly operating hours amounts.
2. The pressure drop across the baghouse shall be maintained within the range of 0.5 to 5.0 inches of water while the emissions unit is in operation.

III. Monitoring and/or Record keeping Requirements

1. The permittee shall maintain monthly records of the following information for this emission unit:
 - a. the operating hours for each month;
 - b. the PM/PM-10, H₂S, SO₂, CO, and VOC emissions for each month;
 - c. the rolling, 12-month summation of the operating hours; and
 - d. the rolling, 12-month summation of PM/PM-10, H₂S, SO₂, CO, and VOC emissions..
2. The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on daily basis.

Issued: To be entered upon final issuance

IV. Reporting Requirements

1. The permittee shall quarterly submit deviation (excursion) reports which identify:
 - a. all exceedances of the rolling, 12-month operating hours limitations; and,
 - b. all exceedances of the rolling, 12-month PM/PM-10, H₂S, SO₂, CO, and VOC emissions limitations.
2. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify that all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.
3. The quarterly deviation reports are due by the date described in Part 1 - General Terms and Conditions of this permit under section (A)(1).
4. The permittee shall also submit annual reports which specify the total PM/PM-10, H₂S, SO₂, CO, and VOC emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.

V. Testing Requirements

1. The permittee shall conduct, or have conducted, emission testing in accordance with the following requirements:
2. The emission testing shall be conducted within 6 months after issuance of the permit.
3. The emission testing shall be conducted to demonstrate compliance with the stack particulate emission limitation.
4. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): for particulates, 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.
5. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to

Issued: To be entered upon final issuance

Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

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

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

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

a. Emission Limitation:

Visible particulate emissions shall not exceed 10% opacity as a 6-minute average (stack emissions).

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, except as provided under OAC rule 3745-17-07(A)(1)(b).

b. Emissions Limitations:

Visible particulate emissions shall not exceed 10% opacity as a 3-minute average (fugitive emissions).

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

Owens Corning Medina Roofing Plant

PTI Application: 16-02247

Issued

Facility ID: 1652050040

Emissions Unit ID: P908

Applicable compliance methods:

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

c. Emissions Limitations:

3.70 lbs/hr of PM/PM-10

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

0.04 kilogram of particulates per megagram of asphalt shingle

Issued: To be entered upon final issuance

Applicable Compliance Methods:

Compliance of the lbs/hr and kilogram of particulates per megagram of asphalt shingle shall be determined using Methods 1 thru 5 of 40 CFR Part 60, Appendix A.

Compliance with tons per year limitation based upon a rolling, 12-month summation of the monthly emissions can be demonstrated by multiplying the maximum hourly limitation by 8,250 (annual hour of operation limitation) and divide by 2000 to convert the results to tons per year.

d. Emissions Limitations:

0.25 lb/hr of SO₂

1.03 ton per year of SO₂, based upon a rolling, 12-month summation.

Applicable Compliance Methods:

The lb/hr emission limitation was based on the emission unit's potential to emit. The production information used to generate the lb/hr emission calculation is confidential. Therefore, no detailed emission calculation can be provided. Compliance with ton per year limitation based upon a rolling, 12-month summation of the monthly emissions can be demonstrated by multiplying the maximum hourly limitation by 8,250 (annual hour of operation limitation) and divide by 2000 to convert the results to ton per year.

If required, compliance shall be determined using the following methods:

Methods 1 thru 4 and 6 of 40 CFR Part 60, Appendix A.

e. Emissions Limitations:

7.86 lbs/hr of CO

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

Applicable Compliance Methods:

The lbs/hr emission limitation was based on the emission unit's potential to emit. The production information used to generate the lbs/hr emission calculation is confidential. Therefore, no detailed emission calculation can be provided. Compliance with tons per year limitation based upon a rolling, 12-month summation of the monthly emissions can be demonstrated by multiplying the maximum hourly limitation by 8,250 (annual hour of operation limitation) and divide by 2000 to convert the results to tons per year.

Issued: To be entered upon final issuance

If required, compliance shall be determined using the following methods:

Methods 1 thru 4 and 10 or 10B of 40 CFR Part 60, Appendix A.

f. Emissions Limitations:

6.59 lbs/hr of VOC

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

Applicable Compliance Methods:

The lbs/hr emission limitation was based on the emission unit's potential to emit. The production information used to generate the lbs/hr emission calculation is confidential. Therefore, no detailed emission calculation can be provided. Compliance with tons per year limitation based upon a rolling, 12-month summation of the monthly emissions can be demonstrated by multiplying the maximum hourly limitation by 8,250 (annual hour of operation limitation) and divide by 2000 to convert the results to tons per year.

If required, compliance shall be determined using the following methods:

Methods 1 thru 4 and 18 or 25 of 40 CFR Part 60, Appendix A.

g. Emissions Limitations:

0.26 lb/hr of H₂S

1.03 ton per year of H₂S based upon a rolling, 12-month summation.

Applicable Compliance Methods:

The lb/hr emission limitation was based on the emission unit's potential to emit. The production information used to generate the lb/hr emission calculation is confidential. Therefore, no detailed emission calculation can be provided. Compliance with ton per year limitation based upon a rolling, 12-month summation of the monthly emissions can be demonstrated by multiplying the maximum hourly limitation by 8,250 (annual hour of operation limitation) and divide by 2000 to convert the results to ton per year.

If required, compliance shall be determined using the following methods:

Methods 1 thru 4 and 15 of 40 CFR Part 60, Appendix A.

Owens Corning Medina Roofing Plant

PTI Application: 16-02347

Issued

Facility ID: 1652050040

Emissions Unit ID: P908

h. Operational Limitation:

8,250 hours per year, based upon a rolling, 12-month summation of the operating hours.

Applicable Compliance Method:

Record keeping requirements in term A.III.1.

141

Owen

PTI A

Emissions Unit ID: P908

Issued: To be entered upon final issuance

I. Miscellaneous Requirements

1. The following terms and conditions of this permit are federally enforceable: A.I through A.V.

Owen
PTI A

Emissions Unit ID: P908

Issued: To be entered upon final issuance

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 baghouse (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 Record keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

143

Owen

PTI A

Issued: To be entered upon final issuance

Emissions Unit ID: P908

Owen
PTI A

Emissions Unit ID: P910

Issued: To be entered upon final issuance

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>	
P910 - Cooling Section #2 (4-wide roofing line) - Modification	OAC rule 3745-31-05(A)(3)	OAC rule 3745-17-07(A) OAC rule 3745-17-07(B) OAC rule 3745-17-11
		OAC rule 3745-17-08(B)
		OAC rule 3745-31- (13) thru (20)
		OAC rule 3745-31-05(C)

Owen:
PTI A

Issued: To be entered upon final issuance

Applicable Emissions
Limitations/Control
Measures

The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-08, 3745-31-(13) thru (20), and 3745-31-05(C).

Particulate matter (PM) and particulate matter less than ten microns in diameter (PM-10) emissions shall not exceed 7.02 lbs/hr PM/PM-10.

Volatile organic compound (VOC) emissions shall not exceed 2.80 lbs/hr.

The hourly emission limitations outlined are based upon the emission unit's Potential to Emit (PTE). Therefore, no hourly records are required to demonstrate compliance with these limitations.

Visible particulate emissions shall not exceed 10% opacity as a 6-minute average (stack emissions)

Visible particulate emissions shall not exceed 10% opacity as a 3-minute average (fugitive emissions)

The emission limitation specified by these rules are less stringent than the emissions limitations established pursuant to OAC rule 3745-31-05 (A)(3).

The permittee shall operate the existing hood to minimize particulate emissions and fugitive dust.

The tons per rolling 12-month period shall not exceed:

VOC - 11.06

Annual operating hours shall be limited to 8,250 hours per year based on a rolling 12-month summation.

The tons per rolling 12-month period shall not exceed :

27.69 tpy PM/PM-10

Owens Corning Medina Roofing Plant

PTI Application: 16-02247

Issued**Facility ID: 1652050040**

Emissions Unit ID: P910

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

1. The maximum annual operating hours for this emissions unit shall not exceed 8,250 hours per year, based upon a rolling, 12-month summation of the operating hours. The permittee has existing operation records and therefore does not need to be limited to first year monthly operating hours amounts.

III. Monitoring and/or Record keeping Requirements

1. The permittee shall maintain monthly records of the following information for this emission unit:
 - a. the operating hours for each month;
 - b. the PM/PM-10 and VOC emissions for each month;
 - c. the rolling, 12-month summation of the operating hours; and,
 - d. the rolling, 12-month summation of PM/PM-10 and VOC emissions.

Owen

PTI A

Emissions Unit ID: P910

Issued: To be entered upon final issuance**V. Reporting Requirements**

1. The permittee shall submit quarterly deviation (excursion) reports which identify:
 - a. all exceedances of the rolling, 12-month operating hours limitations; and,
 - b. all exceedances of the rolling, 12-month PM/PM-10 and VOC emissions limitations.
2. These quarterly deviation reports are due by the date described in Part 1 - General Terms and Conditions of this permit under section (A)(1).
3. The permittee shall also submit annual reports which specify the total PM/PM-10 and VOC emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.

V. Testing Requirements

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

Visible particulate emissions shall not exceed 10% opacity as a 6-minute average (stack emissions).

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, except as provided under OAC rule 3745-17-07(A)(1)(b).
 - b. Emission Limitation:

Visible particulate emissions shall not exceed 10% opacity as a 3-minute average (fugitive emissions).

Applicable compliance method:

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

Issued: To be entered upon final issuance

c. Emissions Limitations:

7.02 lbs/hr PM/PM-10

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

Applicable Compliance Method:

The lbs/hr emission limitation was based on the emission unit's potential to emit. The production information used to generate the lbs/hr emission calculations is confidential. Therefore, no detailed emission calculations can be provided. Compliance with tons per year limitation based upon a rolling, 12-month summation of the monthly emissions can be demonstrated by multiplying the maximum hourly limitation by 8,250 (annual hour of operation limitation) and divide by 2000 to convert the results to tons per year.

If required, compliance shall be determined using the following methods:

For PM, Methods 1 thru 4 and 5A of 40 CFR Part 60, Appendix A.

For PM-10, Methods 1 thru 4 and 201 of 40 CFR Part 51, Appendix M.

d. Emissions Limitations:

2.80 lbs/hr of VOC

11.06 tons per year of VOC based upon a rolling, 12-month summation.

Applicable Compliance Methods:

The lbs/hr emission limitation was based on the emission unit's potential to emit. The production information used to generate the lbs/hr emission calculation is confidential. Therefore, no detailed emission calculation can be provided. Compliance with tons per year limitation based upon a rolling, 12-month summation of the monthly emissions can be demonstrated by multiplying the maximum hourly limitation by 8,250 (annual hour of operation limitation) and divide by 2000 to convert the results to tons per year.

If required, compliance shall be determined using the following methods:

Methods 1 thru 4 and 18 or 25 of 40 CFR Part 60, Appendix A.

e. Operational Limitation:

8,250 hours per year, based upon a rolling, 12-month summation of the operating hours.

Owens Corning Medina Roofing Plant

PTI Application: 16-02247

Issued

Facility ID: 1652050040

Emissions Unit ID: P910

Applicable Compliance Method:

Record keeping requirements in term A.III.1.

VI. Miscellaneous Requirements

1. The following terms and conditions of this permit are federally enforceable: A.I through A.V.

Issued: To be entered upon final issuance

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>
P910 - Cooling Section #2 (4-wide roofing line) - Modification	None	None

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Record keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Owen
PTI A

Emissions Unit ID: P911

Issued: To be entered upon final issuance

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 3745-17-07(B) OAC rule 3745-17-11
P911 - Cooling Section #1 (3-wide roofing line) - Modification	OAC rule 3745-31-05(A)(3)	OAC rule 3745-17-08(B)
		OAC rule 3745-31- (13) thru (20)
		OAC rule 3745-31-05(C)

Owen:

PTI A

Emissions Unit ID: P911

Issued: To be entered upon final issuance

Applicable Emissions
Limitations/Control
Measures

The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-08, 3745-31-(13) thru (20), and 3745-31-05(C).

Particulate matter (PM) and particulate matter less than ten microns in diameter (PM-10) emissions shall not exceed 4.81 lbs/hr PM/PM-10.

Volatile organic compound (VOC) emissions shall not exceed 1.92 lbs/hr.

The hourly emission limitations outlined are based upon the emission unit's Potential to Emit (PTE). Therefore, no hourly records are required to demonstrate compliance with these limits.

Visible particulate emissions shall not exceed 10% opacity as a 6-minute average (stack emissions)

Visible particulate emissions shall not exceed 10% opacity as a 3-minute average (fugitive emissions)

The emissions limitations

specified by these rules are less stringent than the emission limitation established pursuant to OAC rule 3745-31-05 (A)(3).

The permittee shall operate the existing hood to minimize particulate emissions and fugitive dust.

The tons per rolling 12-month period shall not exceed:

VOC - 6.83

Annual operating hours shall be limited to 8,250 hours per year based on a rolling 12-month summation.

The tons per rolling 12-month period shall not exceed :

17.09 tpy PM/PM-10

Owens Corning Medina Roofing Plant

PTI Application: 16-02247

Issued

Facility ID: 1652050040

Emissions Unit ID: P911

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

1. The maximum annual operating hours for this emission unit shall not exceed 8,250 hours per year, based upon a rolling, 12-month summation of the operating hours. The permittee has existing operation records and therefore does not need to be limited to first year monthly operating hours amounts.

III. Monitoring and/or Record keeping Requirements

1. The permittee shall maintain monthly records of the following information for this emission unit:
 - a. the operating hours for each month;
 - b. the PM/PM-10 and VOC emissions for each month;
 - c. the rolling, 12-month summation of the operating hours; and
 - d. the rolling, 12-month summation of PM/PM-10 and VOC emissions.

Issued: To be entered upon final issuance**V. Reporting Requirements**

1. The permittee shall submit quarterly deviation (excursion) reports which identify:
 - a. all exceedances of the rolling, 12-month operating hours limitations; and
 - b. all exceedances of the rolling, 12-month PM/PM-10 and VOC emissions limitations.
2. These quarterly deviation reports are due by the date described in Part 1 - General Terms and Conditions of this permit under section (A)(1).
3. The permittee shall also submit annual reports which specify the total PM/PM-10 and VOC emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.

V. Testing Requirements

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

Visible particulate emissions shall not exceed 10% opacity as a 6-minute average (stack emissions).

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, except as provided under OAC rule 3745-17-07(A)(1)(b).
 - b. Emission Limitation:

Visible particulate emissions shall not exceed 10% opacity as a 3-minute average (fugitive emissions).

Applicable compliance method:

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

Issued: To be entered upon final issuance

c. Emissions Limitations:

4.81 lb/hr of PM/PM-10

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

Applicable Compliance Methods:

The lbs/hr emission limitation was based on the emission unit's potential to emit. The production information used to generate the lbs/hr emission calculation is confidential. Therefore, no detailed emission calculation can be provided. Compliance with tons per year limitation based upon a rolling, 12-month summation of the monthly emissions can be demonstrated by multiplying the maximum hourly limitation by 8,250 (annual hour of operation limitation) and divide by 2000 to convert the results to tons per year.

If required, compliance shall be determined using the following methods:

For PM, Methods 1 thru 4 and 5A of 40 CFR Part 60, Appendix A.

For PM-10, Methods 1 thru 4 and 201 of 40 CFR Part 51, Appendix M.

d. Emissions Limitations:

1.92 lbs/hr of VOC

6.83 tons per year of VOC based upon a rolling, 12-month summation.

Applicable Compliance Methods:

The lbs/hr emission limitation was based on the emission unit's potential to emit. The production information used to generate the lbs/hr emission calculation is confidential. Therefore, no detailed emission calculation can be provided. Compliance with tons per year limitation based upon a rolling, 12-month summation of the monthly emissions can be demonstrated by multiplying the maximum hourly limitation by 8,250 (annual hour of operation limitation) and divide by 2000 to convert the results to tons per year.

If required, compliance shall be determined using the following methods:

Methods 1 thru 4 and 18 or 25 of 40 CFR Part 60, Appendix A.

e. Operational Limitation:

8,250 hours per year, based upon a rolling, 12-month summation of the operating hours.

Owens Corning Medina Roofing Plant

PTI Application: 16-02247

Issued

Facility ID: 1652050040

Emissions Unit ID: P911

Applicable Compliance Method:

Record keeping requirements in term A.III.1.

VI. Miscellaneous Requirements

1. The following terms and conditions of this permit are federally enforceable: A.I through A.V.

Owen
PTI A

Emissions Unit ID: P911

Issued: To be entered upon final issuance

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>
P911 - Cooling Section #1 (3-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 Record keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Owen:
PTI A

Emissions Unit ID: P917

Issued: To be entered upon final issuance

40 CFR Part 63, Subpart LLLLL

Applicable Emissions Limitations/Control Measures

The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-08(B), 3745-31- (13) thru (20), 3745-31-05(C), and 40 CFR Part 63, Subpart LLLLL.

Particulate matter (PM) and particulate matter less than ten microns in diameter (PM-10) emissions shall not exceed 0.05 lbs/hr (stack emissions).

Volatile organic compound (VOC) emissions shall not exceed 7.8 lbs/hr.

Carbon monoxide (CO) emissions shall not exceed 0.33 lb/hr.

The hourly emission limitations outlined are based upon the emission unit's Potential to Emit (PTE). Therefore, no hourly records are required to demonstrate compliance with these limitations.

The overall control efficiency shall not be less than 99% for PM/PM-10.

Visible particulate emissions shall not exceed 10% opacity as a 6-minute average (stack emissions).

Visible particulate emissions shall not exceed 10% opacity as a 3-minute average (fugitive emissions).

The emission limitations specified by

these rules are less stringent than the emissions limitations established pursuant to OAC rule 3745-31-05(A)(3) and 40 CFR Part 60, Subpart UU.

The filler mixer shall be adequately enclosed and vented to a baghouse.

The tons per rolling 12-month period shall not exceed:

VOC - 24.89
CO - 1.06

Annual operating hours shall be limited to 8,250 hours per year based on a rolling 12-month summation.

The tons per rolling 12-month period shall not exceed:

0.22 tpy PM/PM-10.

0.04 kilogram of particulate per megagram (kg/Mg) (0.8 lb/ton)

The compliance date for this rule is May 1, 2006.

Issued: To be entered upon final issuance**2. Additional Terms and Conditions****2.a** None**II. Operational Restrictions**

1. The maximum annual operating hours for this emission unit shall not exceed 8,250 hours per year, based upon a rolling, 12-month summation of the operating hours. The permittee has existing operation records and therefore does not need to be limited to first year monthly operating hours amounts.
2. The pressure drop across the baghouse shall be maintained within the range of 0.5 to 5.0 inches of water while the emissions unit is in operation.

III. Monitoring and/or Record keeping Requirements

1. The permittee shall maintain monthly records of the following information for this emission unit:
 - a. the operating hours for each month;
 - b. the PM/PM-10, CO and VOC emissions for each month;
 - c. the rolling, 12-month summation of the operating hours; and,
 - d. the rolling, 12-month summation of PM/PM-10, CO and VOC emissions.
2. The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on daily basis.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports which identify:
 - a. all exceedances of the rolling, 12-month operating hours limitations; and,
 - b. all exceedances of the rolling, 12-month PM/PM-10, CO and VOC emissions limitations.
2. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify that

Emissions Unit ID: P917

all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.

3. The quarterly deviation reports are due by the date described in Part 1 - General Terms and Conditions of this permit under section (A)(1).
4. The permittee shall also submit annual reports which specify the total PM/PM-10, VOC, and CO emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year

V. Testing Requirements

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

- a. Emission Limitation:

Visible particulate emissions shall not exceed 10% opacity as a 6-minute average (stack emissions).

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, except as provided under OAC rule 3745-17-07(A)(1)(b).

- b. Emission Limitation:

Visible particulate emissions shall not exceed 10% opacity as a 3-minute average (fugitive emissions).

Applicable compliance method:

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

- c. Emissions Limitations:

0.05 lb/hr of PM/PM-10 (stack emissions)

0.22 ton per year of PM/PM-10 based upon a rolling, 12-month summation

Applicable Compliance Methods:

The lb/hr emission limitation was based on the emission unit's potential to emit. The

Issued: To be entered upon final issuance

production information used to generate the lb/hr emission calculation is confidential. Therefore, no detailed emission calculation can be provided. Compliance with ton per year limitation based upon a rolling, 12-month summation of the monthly emissions can be demonstrated by multiplying the maximum hourly limitation by 8,250 (annual hour of operation limitation) and divide by 2000 to convert the results to ton per year.

If required, compliance shall be determined using the following methods:

For PM, Methods 1 thru 4 and 5A of 40 CFR Part 60, Appendix A.

For PM-10, Methods 1 thru 4 and 201 of 40 CFR Part 51, Appendix M.

d. Emissions Limitations:

0.33 lb/hr of CO

1.06 tons per year of CO based upon a rolling, 12-month summation.

Applicable Compliance Methods:

The lb/hr emission limitation was based on the emission unit's potential to emit. The production information used to generate the lb/hr emission calculation is confidential. Therefore, no detailed emission calculation can be provided. Compliance with tons per year limitation based upon a rolling, 12-month summation of the monthly emissions can be demonstrated by multiplying the maximum hourly limitation by 8,250 (annual hour of operation limitation) and divide by 2000 to convert the results to tons per year.

If required, compliance shall be determined using the following methods:

For CO, Methods 1 thru 4 and 10 of 40 CFR Part 60, Appendix A.

e. Emissions Limitations:

7.8 lbs/hr of VOC

24.89 tons per year of VOC, based upon a rolling, 12-month summation.

Applicable Compliance Methods:

The lbs/hr emission limitation was based on the emission unit's potential to emit. The production information used to generate the lbs/hr emission calculation is confidential. Therefore, no detailed emission calculation can be provided. Compliance with tons per year limitation based upon a rolling, 12-month summation of the monthly emissions can be demonstrated by multiplying the maximum hourly limitation by 8,250 (annual hour of

Emissions Unit ID: P917

operation limitation) and divide by 2000 to convert the results to tons per year.

If required, compliance shall be determined using the following methods:

For VOC, Methods 1 thru 4 and 18 of 40 CFR Part 60, Appendix A.

f. Operational Limitation:

8,250 hours per year, based upon a rolling, 12-month summation of the operating hours.

Applicable Compliance Method:

Record keeping requirements in term A.III.1.

VI. Miscellaneous Requirements

1. The following terms and conditions of this permit are federally enforceable: A.I through A.V.

Owen
PTI A

Emissions Unit ID: P917

Issued: To be entered upon final issuance

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>
P917 - Asphalt Filler Mixer #1 controlled with a baghouse (Serves 3-Wide Roofing Line)	OAC rule 3745-31-05	None

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Record keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

165

Owen

PTI A

Issued: To be entered upon final issuance

Emissions Unit ID: P917

Owen
PTI A

Emissions Unit ID: T007

Issued: To be entered upon final issuance

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>
T007 - Oxidized Asphalt Storage Tank #50 - 60,000 gallon fixed roof storage tank controlled by a JZ thermal incinerator	OAC rule 3745-31-05(A)(3)

Owen:
PTI A

Emissions Unit ID: T007

Issued: To be entered upon final issuance

	40 CFR Part 63, Subpart LLLLL	<u>Applicable Emissions Limitations/Control Measures</u> <p>The requirements of this rule also include compliance with the requirements of OAC rules 3745-21-09(L), 3745-31- (13) thru (20), 40 CFR Part 60, Subpart Kb, and Subpart UU, and 40 CFR Part 63, Subpart LLLLL.</p> <p>Particulate matter (PM) and particulate matter less than ten microns in diameter (PM-10) emissions shall not exceed 0.01 lb/hr and 0.06 ton per year.</p> <p>Sulfur dioxide (SO₂) emissions shall not exceed 0.21 lb/hr.</p> <p>Carbon monoxide (CO) emissions shall not exceed 0.02 lb/hr.</p> <p>Volatile organic compound (VOC) emissions shall not exceed 0.05 lb/hr.</p> <p>Hydrogen sulfides (H₂S) emissions shall not exceed 0.007 lb/hr and 0.03 ton per year.</p> <p>The hourly and annual emission limitations outlined are based upon the emission unit's Potential to Emit (PTE). Therefore, no hourly or annual records are required to demonstrate compliance with these limitations.</p> <p>The overall control efficiency shall not be less than 95% for PM/PM-10, CO, VOC and H₂S.</p> <p>PM emissions from the natural gas combustion of the JZ incinerator</p>
OAC rule 3745-17-07(A) OAC rule 3745-17-11		
OAC rule 3745-21-09(L)		
OAC rules 3745-3745-31- (13) thru (20)		
40 CFR Part 60, Subpart Kb		
40 CFR Part 60, Subpart UU		

Owens Corning Medina Roofing Plant

PTI Application: 16-02247

Issued

Facility ID: 1652050040

Emissions Unit ID: T007

controlling emissions units P003 - P005, T007 - T009, T026, T029, T031 - T033, T036, and T037 shall not exceed 0.15 pound per hour and 0.64 ton per year.

NO_x emissions from the natural gas combustion of the JZ incinerator controlling emissions units P003 - P005, T007 - T009, T026, T029, T031 - T033, T036, and T037 shall not exceed 1.47 pounds per hour and 6.43 tons per year.

SO₂ emissions from the natural gas combustion of the JZ incinerator controlling emissions units P003 - P005, T007 - T009, T026, T029, T031 - T033, T036, and T037 shall not exceed 3.13 pounds per hour and 13.69 tons per year.

CO emissions from the natural gas combustion of the JZ incinerator controlling emissions units P003 - P005, T007 - T009, T026, T029, T031 - T033, T036, and T037 shall not exceed 0.84 pound per hour and 3.68 tons per year.

OC emissions from the natural gas combustion of the JZ incinerator controlling P003 - P005, T007 - T009, T026, T029, T031 - T033, T036, and T037 shall not exceed 0.05 pound per hour

and 0.24 ton per year.

The emissions limitations specified by these rule are less stringent than the emissions limitations established pursuant to OAC rule 3745-31-05 (A)(3), 40 CFR Part 60, Subpart UU, and 40 CFR Part 63, Subpart LLLLL.

See A.II.a below.

The tons per rolling 12-month period shall not exceed:

CO - 0.07

VOC - 0.21

SO₂ - 0.94.

The overall control efficiency shall not be less than 95% for CO and VOC.

See A.I.2.a below.

Visible emissions to the ambient air shall not exceed 0% opacity, except for one consecutive 15-minute period in any 24-hour period when the transfer lines are being blown for clearing.

Exempt per 40 CFR 63.8681(c) since subject to 40 CFR Part 60, Subpart Kb.

Issued: To be entered upon final issuance**2. Additional Terms and Conditions**

- 2.a** The permittee shall install a closed vent system and control device meeting the following specifications:
- i. the closed vent system shall be designed to collect all VOC vapors and gases discharged from the storage vessel and operated with no detectable emissions as specified by an instrument reading of less than 500 ppm above background and visual inspections as determined in paragraph 60.485(b); and
 - ii. the control device shall be designed and operated to reduce inlet VOC emissions by 95% or greater.

II. Operational Restrictions

1. The permittee shall not place, store, or hold in this fixed roof tank any petroleum liquid which, as stored, has a true vapor pressure greater than 1.52 pounds per square inch absolute, unless such tank is designed or equipped in accordance with the requirements of paragraph (L)(1) or OAC rule 3745-21-09.
2. The average combustion temperature within the thermal incinerator, for any 3-hour block of time when the emissions unit is in operation, shall not be less than 1450 degrees Fahrenheit.
3. The operating pressure range for the vacuum manifold shall be continuously maintained within a range of 2 to 8 inches of water while the emissions unit is in operation.

III. Monitoring and/or Record keeping Requirements

1. The permittee shall keep copies of all records required by this section, except for the record required section A.III.2, for at least 2 years. The records required by section A.III.2 will be kept for the life of the source.
2. The permittee shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel.
3. The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the fume incinerator when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

Issued

Emissions Unit ID: T007

4. The permittee shall collect and record the following information for each day:
 - a. all 3-hour blocks of time during which the average combustion temperature within the fume incinerator, when the emissions unit was in operation, was less than 1450 degrees Fahrenheit; and
 - b. a log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.
5. The permittee shall install, operate and maintain a continuous monitor and recorder which measures the pressure in the vacuum manifold while the emissions unit is in operation. The monitoring equipment and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee. Exceedance of the normal operating pressure range shall require shutdown, investigation of any problems and corrective action to enable operation in the normal range.
6. The permittee shall maintain monthly records which show the date(s) and time(s) when the vacuum manifold pressure falls below normal operating levels. These records shall be kept on site and be made available to the Director, or any authorized representative of the Director, for review during normal business hours.
7. The permittee shall maintain records of the following:
 - a. the types of petroleum liquids stored in the tank;
 - b. the period of storage; and
 - c. the maximum true vapor pressure (in pounds per square inch absolute), as stored, of each liquid.
8. The permittee shall maintain monthly records of the following information for this emission unit:
 - a. the CO, VOC, and SO₂ emissions for each month; and
 - b. the rolling, 12-month summation of CO, VOC, and SO₂ emissions.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports which identify all 3-hour blocks of time during which the average combustion temperature within the fume incinerator does not comply with the temperature limitation specified in term A.II.1. This report shall contain, as a minimum, the date, time or occurrence, cause, explanation and corrective action taken for any temperature variations identified.

Issued: To be entered upon final issuance

2. The permittee shall submit quarterly deviation (excursion) reports which identify all times during which the pressure in the vacuum manifold exceeded the normal operating range. This report shall contain, as a minimum, the date, time or occurrence, cause, explanation and corrective action taken for any exceedances identified.
3. The permittee shall submit quarterly deviation (excursion) reports which identify:
 - a. all exceedances of the rolling, 12-month CO, VOC, and SO₂ emissions limitations.
4. The quarterly deviation reports shall be submitted in accordance with the reporting requirements as specified in Part I - General Term and Condition A.1.c of this permit.
5. If the permittee places, stores, or holds any petroleum liquid with a true vapor pressure which is greater than 1.52 pounds per square inch absolute and such tank does not comply with OAC rule 3745-21-09(L)(1), the permittee shall so notify the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days of becoming aware of the occurrence.
6. After installing the control equipment required in section A.I.2.a, the permittee shall submit a report to the Administrator that certifies that the control equipment meets the specifications of paragraph 60.112b(a)(2) and 60.113b(b)(2), (b)(3), and (b)(4). This report shall be an attachment to the notification required by paragraph 60.7(a)(3).
7. The permittee shall also submit annual reports which specify the total CO, VOC, and SO₂ emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.

V. Testing Requirements

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

Visible emissions to the ambient air shall not exceed 0% opacity, except for one consecutive 15-minute period in any 24-hour period when the transfer lines are being blown for clearing.

Applicable compliance method:

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

Emissions Unit ID: T007

Stationary Sources"), as such Appendix existed on July 1, 2002, except as provided under OAC rule 3745-17-07(A)(1)(b).

b. Emissions Limitations:

0.01 lb/hr of PM/PM-10

0.06 ton per year of PM/PM-10

Applicable Compliance Methods:

The lb/hr emission limitation was based on the emissions unit's potential to emit. The production information used to generate the lb/hr emission calculation is confidential. Therefore, no detailed emission calculation can be provided. As long as the permittee is in compliance with the operational requirements specified in A.II.2, compliance with the lbs/hr emission limitations is ensured. Compliance with ton per year limitation can be ensured by compliance with the lb/hr limitation.

If required, compliance shall be determined using the following methods:

Methods 1 thru 4 and 5 of 40 CFR Part 60, Appendix A.

c. Emissions Limitations:

0.21 lb/hr of SO₂

0.94 ton per year of SO₂, based upon a rolling, 12-month summation

Issued: To be entered upon final issuance

Applicable Compliance Methods:

The lb/hr emission limitation was based on the emission unit's potential to emit. The production information used to generate the lb/hr emission calculation is confidential. Therefore, no detailed emission calculation can be provided. Compliance with ton per year limitation can be ensured thru record keeping requirements in A.III

If required, compliance shall be determined using the following methods:

Methods 1 thru 4 and 6 of 40 CFR Part 60, Appendix A.

d. Emission Limitation:

0.05 lb/hr of VOC

0.21 ton per year of VOC, based upon a rolling, 12-month summation

Applicable Compliance Methods:

The lb/hr emission limitation was based on the emission unit's potential to emit. The production information used to generate the lb/hr emission calculation is confidential. Therefore, no detailed emission calculation can be provided. Compliance with ton per year limitation can be ensured by compliance thru record keeping requirements in A.III

If required, compliance shall be determined using the following methods:

Methods 1 thru 4 and 18 or 25 of 40 CFR Part 60, Appendix A.

e. Emissions Limitations:

0.001 lb/hr of H₂S

0.03 ton per year of H₂S

Applicable Compliance Methods:

The lb/hr emission limitation was based on the emission unit's potential to emit. The production information used to generate the lb/hr emission calculation is confidential. Therefore, no detailed emission calculation can be provided. Compliance with ton per year limitation by compliance with the lb/hr limitation.

If required, compliance shall be determined using the following methods:

174

Owen:

PTI A

Issued: To be entered upon final issuance

Methods 1 thru 4 and 15 of 40 CFR Part 60, Appendix A.

Emissions Unit ID: T007

Issued: To be entered upon final issuance

f. Emissions Limitations:

0.02 lb/hr of CO
0.07 ton per year of CO

Applicable Compliance Methods:

The lb/hr emission limitation was based on the emission unit's potential to emit. The production information used to generate the lb/hr emission calculation is confidential. Therefore, no detailed emission calculation can be provided.. Compliance with ton per year limitation thru record keeping requirements in A.III.

If required, compliance shall be determined using the following methods:

Methods 1 thru 4 and 10 of 40 CFR Part 60, Appendix A.

g. Emissions Limitations:

0.15 lb/hr of PM (products of combustion from incinerator)
0.64 ton per year of PM

Applicable Compliance Methods:

Compliance with the lb/hr emission limitation shall be determined by multiplying the maximum input capacity (10.2 MMBtu/hr) by the AP-42 emission factor for the combustion of fuel oil. Compliance with the annual emission limitation shall be determined by multiplying the short term limitation by 8760 hours per year and dividing by 2000 to convert to ton per year.

h. Emission Limitations:

0.84 lb/hr of CO (products of combustion from incinerator)
3.68 tons per year of CO

Applicable Compliance Methods:

Compliance with the lb/hr emission limitation shall be determined by multiplying the maximum input capacity (10.2 MMBtu/hr) by the AP-42 emission factor for the combustion of natural gas. Compliance with the annual emission limitation shall be determined by multiplying the short term limitation by 8760 hours per year and dividing by 2000 to convert to tons per year.

176

Owens Corning Medina Roofing Plant

PTI Application: 16-02347

Issued

Facility ID: 1652050040

Emissions Unit ID: T007

i. Emission Limitation:

3.13 lbs/hr of SO₂ (products of combustion from incinerator)

13.69 tons per year of SO₂

Applicable Compliance Methods:

Compliance with the lbs/hr emission limitation shall be determined by multiplying the maximum input capacity (10.2 MMBtu/hr) by the AP-42 emission factor for the combustion of fuel oil. Compliance with the annual emission limitation shall be determined by multiplying the short term limitation by 8760 hours per year and dividing by 2000 to convert to tons per year.

j. Emission Limitation:

0.05 lb/hr of VOC (products of combustion from incinerator)

0.24 ton per year of VOC

Applicable Compliance Methods:

Compliance with the lb/hr emission limitation shall be determined by multiplying the maximum input capacity (10.2 MMBtu/hr) by the AP-42 emission factor for the combustion of natural gas. Compliance with the annual emission limitation shall be determined by multiplying the short term limitation by 8760 hours per year and dividing by 2000 to convert to ton per year.

k. Emissions Limitations:

1.47 lbs/hr NO_x (products of combustion from incinerator)

6.43 tons per year of NO_x

Applicable Compliance Method:

Compliance with the lbs/hr emission limitation shall be determined by multiplying the maximum input capacity (10.2 MMBtu/hr) by the AP-42 emission factor for the combustion of fuel oil. Compliance with the annual emission limitation shall be determined by multiplying the short term limitation by 8760 hours per year and dividing by 2000 to convert to tons per year.

VI. Miscellaneous Requirements

1. The following terms and conditions of this permit are federally enforceable: A.I through A.V.

Owen
PTI A

Emissions Unit ID: T007

Issued: To be entered upon final issuance

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>
T007 - Oxidized Asphalt Storage Tank #50 - 60,000 gallon fixed roof storage tank controlled by a JZ thermal incinerator	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

179

Owen:

PTI A

Issued: To be entered upon final issuance

None

Emissions Unit ID: T007

Owen:
PTI A

Emissions Unit ID: T035

Issued: To be entered upon final issuance

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>
T035 - Flux Asphalt Storage Tank #46 - 1,700,000 gallon fixed roof storage tank controlled by a PCC thermal incinerator	OAC rule 3745-31-05(A)(3)

Owen:
PTI A

Emissions Unit ID: T035

Issued: To be entered upon final issuance

		<u>Applicable Emissions Limitations/Control Measures</u>
	40 CFR Part 63, Subpart LLLLL	<p>The requirements of this rule also include compliance with the requirements of OAC rules 3745-21-09(L), 3745-31- (13) thru (20), and 40 CFR Part 60, Subpart Kb and Subpart UU, and 40 CFR Part 63, Subpart LLLLL.</p> <p>Particulate matter (PM) and particulate matter less than ten microns in diameter (PM-10) emissions shall not exceed 0.03 lb/hr and 0.13 ton per year.</p>
OAC rule 3745-17-07(A) OAC rule 3745-17-11		Sulfur dioxide (SO ₂) emissions shall not exceed 0.09 lb/hr.
OAC rule 3745-21-09(L)		Carbon monoxide (CO) emissions shall not exceed 0.002 lb/hr.
OAC rule 3745-3745-31- (13) thru (20)		Volatile organic compound (VOC) emissions shall not exceed 0.10 lb/hr.
40 CFR Part 60, Subpart Kb		Hydrogen sulfides (H ₂ S) emissions shall not exceed 0.002 lb/hr and 0.01 ton per year.
40 CFR Part 60, Subpart UU		<p>The hourly and annual emission limitations outlined are based upon the emission unit's Potential to Emit (PTE). Therefore, no hourly or annual records are required to demonstrate compliance with these limitations.</p> <p>The overall control efficiency shall not be less than 95% for PM/PM-10 and H₂S.</p> <p>PM emissions from the natural gas combustion of the PCC incinerator controlling emissions units J005, P006 -</p>

Owens Corning Medina Roofing Plant

PTI Application: 16-02247

Issued

Facility ID: 1652050040

Emissions Unit ID: T035

P007, T027, T030, and T035 shall not exceed 0.17 pound per hour and 0.76 ton per year.

NOx emissions from the natural gas combustion of the PCC incinerator controlling emissions units J005, P006 - P007, T027, T030, and T035 shall not exceed 1.72 pounds per hour and 7.56 tons per year.

SO₂ emissions from the natural gas combustion of the PCC incinerator controlling emissions units J005, P006 - P007, T027, T030, and T035 shall not exceed 3.68 pounds per hour and 16.11 tons per year.

CO emissions from the natural gas combustion of the PCC incinerator controlling emissions units J005, P006 - P007, T027, T030, and T035 shall not exceed 0.99 pound per hour and 4.33 tons per year.

OC emissions from the natural gas combustion of the PCC incinerator controlling J005, P006 - P007, T027, T030, and T035 shall not exceed 0.06 pound per hour and 0.28 ton per year.

The emissions limitations specified by these rules are less stringent than the

emissions limitations established pursuant to OAC rule 3745-31-05 (A)(3), 40 CFR Part 60, Subpart UU, and 40 CFR Part 63, Subpart LLLLL.

See A.II.a below.

The tons per rolling 12-month period shall not exceed:

- CO - 0.01
- VOC - 0.44
- SO₂ - 0.39.

The overall control efficiency shall not be less than 95% for CO and VOC.

Exempt,
See A.III.1 and A.III.2 below.

Visible particulate emissions to the ambient air shall not exceed 0% opacity, except for one consecutive 15-minute period in any 24-hour period when the transfer lines are being blown for clearing.

Visible particulate emissions to the ambient air shall not exceed 0% opacity for exhaust gases.

The compliance date for this rule is May 1, 2006.

Issued: To be entered upon final issuance**2. Additional Terms and Conditions****2.a** None**II. Operational Restrictions**

1. The permittee shall not place, store, or hold in this fixed roof tank any petroleum liquid which, as stored, has a true vapor pressure greater than 1.52 pounds per square inch absolute, unless such tank is designed or equipped in accordance with the requirements of paragraph (L)(1) or OAC rule 3745-21-09.
2. The average combustion temperature within the thermal incinerator, for any 3-hour block of time when the emissions unit is in operation, shall not be less than 1450 degrees Fahrenheit.
3. The operating pressure range for the vacuum manifold shall be continuously maintained within a range of 2 to 8 inches of water while the emissions unit is in operation.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall keep copies of all records required by this section, except for the record required section A.III.2, for at least 2 years. The record required by section A.III.2 will be kept for the life of the source.
2. The permittee shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel.
3. The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the fume incinerator when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.
4. The permittee shall collect and record the following information for each day:
 - a. all 3-hour blocks of time during which the average combustion temperature within the fume incinerator, when the emissions unit was in operation, was less than 1450 degrees Fahrenheit; and
 - b. a log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.

Issued

Emissions Unit ID: T035

5. The permittee shall install, operate and maintain a continuous monitor and recorder which measures the pressure in the vacuum manifold while the emissions unit is in operation. The monitoring equipment and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee. Exceedance of the normal operating pressure range shall require shutdown, investigation of any problems and corrective action to enable operation in the normal range.
6. The permittee shall maintain monthly records which show the date(s) and time(s) when the vacuum manifold pressure falls below normal operating levels. These records shall be kept on site and be made available to the Director, or any authorized representative of the Director, for review during normal business hours.
7. The permittee shall maintain records of the following:
 - a. the types of petroleum liquids stored in the tank; and
 - b. the maximum true vapor pressure (in pounds per square inch absolute), as stored, of each liquid that has a maximum true vapor pressure greater than 0.508 pounds per square inch absolute.
8. The permittee shall maintain monthly records of the following information for this emission unit:
 - a. the CO, VOC, and SO₂ emissions for each month; and
 - b. the rolling, 12-month summation of CO, VOC, and SO₂ emissions.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports which identify all 3-hour blocks of time during which the average combustion temperature within the fume incinerator does not comply with the temperature limitation specified in term A.II.1. This report shall contain, as a minimum, the date, time or occurrence, cause, explanation and corrective action taken for any temperature variations identified.
2. The permittee shall submit quarterly deviation (excursion) reports which identify all times during which the pressure in the vacuum manifold exceeded the normal operating range. This report shall contain, as a minimum, the date, time or occurrence, cause, explanation and corrective action taken for any exceedances identified.
3. The permittee shall submit quarterly deviation (excursion) reports which identify:
 - a. all exceedances of the rolling, 12-month CO, VOC, and SO₂ emissions limitations.
4. The quarterly deviation reports shall be submitted in accordance with the reporting requirements

Issued: To be entered upon final issuance

as specified in Part I - General Term and Condition A.1.c of this permit.

5. If the permittee places, stores, or holds any petroleum liquid with a true vapor pressure which is greater than 1.52 pounds per square inch absolute and such tank does not comply with OAC rule 3745-21-09(L)(1), the permittee shall so notify the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days of becoming aware of the occurrence.
6. The permittee shall also submit annual reports which specify the total CO, VOC, and SO₂ emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.

V. Testing Requirements

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

- a. Emission Limitation:

Visible emissions to the ambient air shall not exceed 0% opacity, except for one consecutive 15-minute period in any 24-hour period when the transfer lines are being blown for clearing.

Applicable compliance method:

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, except as provided under OAC rule 3745-17-07(A)(1)(b).

- b. Emissions Limitations:

0.03 lb/hr of PM/PM-10
0.13 ton per year of PM/PM-10

Applicable Compliance Methods:

The lb/hr emission limitation was based on the emissions unit's potential to emit. The production information used to generate the lb/hr emission calculation is confidential. Therefore, no detailed emission calculation can be provided. Compliance with ton per year limitation can be ensured by compliance with the lb/hr limitation.

Emissions Unit ID: T035

If required, compliance shall be determined using the following methods:

Methods 1 thru 4 and 5 of 40 CFR Part 60, Appendix A.

c. Emissions Limitations:

0.09 lb/hr of SO₂

0.39 ton per year of SO₂, based upon a rolling 12-month summation

Applicable Compliance Methods:

The lb/hr emission limitation was based on the emission unit's potential to emit. The production information used to generate the lb/hr emission calculation is confidential. Therefore, no detailed emission calculation can be provided. Compliance with ton per year limitation can be ensured thru record keeping requirements in A.III .

If required, compliance shall be determined using the following methods:

Methods 1 thru 4 and 6 of 40 CFR Part 60, Appendix A.

d. Emissions Limitations:

0.10 lb/hr of VOC

0.44 ton per year of VOC, based upon a rolling 12-month summation.

Issued: To be entered upon final issuance

Applicable Compliance Methods:

The lb/hr emission limitation was based on the emissions unit's potential to emit. The production information used to generate the lb/hr emission calculation is confidential. Therefore, no detailed emission calculation can be provided. Compliance with ton per year limitation can be ensured thru record keeping requirements in A.III

If required, compliance shall be determined using the following methods:

Methods 1 thru 4 and 18 or 25 of 40 CFR Part 60, Appendix A.

e. Emissions Limitations:

0.002 lb/hr of H₂S

0.01 ton per year of H₂S

Applicable Compliance Methods:

The lb/hr emission limitation was based on the emission unit's potential to emit. The production information used to generate the lb/hr emission calculation is confidential. Therefore, no detailed emission calculation can be provided. Compliance with ton per year limitation can be ensured by compliance with the lb/hr limitation.

If required, compliance shall be determined using the following methods:

Methods 1 thru 4 and 15 of 40 CFR Part 60, Appendix A.

f. Emission Limitation:

0.17 lb/hr of PM (products of combustion from incinerator)

0.76 ton per year of PM

Applicable Compliance Method:

Compliance with the lb/hr emission limitation shall be determined by multiplying the maximum input capacity (12 MMBtu/hr) by the AP-42 emission factor for the combustion of fuel oil. Compliance with the annual emission limitation shall be determined by multiplying the short term limitation by 8760 hours per year and dividing by 2000 to convert to ton per year.

g. Emission Limitation:

Issued: To be entered upon final issuance

0.99 lb/hr of CO (products of combustion from incinerator)
4.33 tons per year of CO

Applicable Compliance Methods:

Compliance with the lb/hr emission limitation shall be determined by multiplying the maximum input capacity (12 MMBtu/hr) by the AP-42 emission factor for the combustion of natural gas. Compliance with the annual emission limitation shall be determined by multiplying the short term limitation by 8760 hours per year and dividing by 2000 to convert to tons per year.

h. Emissions Limitations:

3.68 lb/hr of SO₂ (products of combustion from incinerator)
16.11 tons per year of SO₂

Applicable Compliance Methods:

Compliance with the lb/hr emission limitation shall be determined by multiplying the maximum input capacity (12 MMBtu/hr) by the AP-42 emission factor for the combustion of fuel oil. Compliance with the annual emission limitation shall be determined by multiplying the short term limitation by 8760 hours per year and dividing by 2000 to convert to tons per year.

i. Emissions Limitations:

0.06 lb/hr of VOC (products of combustion from incinerator)
0.28 ton per year of VOC

Applicable Compliance Methods:

Compliance with the lb/hr emission limitation shall be determined by multiplying the maximum input capacity (12 MMBtu/hr) by the AP-42 emission factor for the combustion of natural gas. Compliance with the annual emission limitation shall be determined by multiplying the short term limitation by 8760 hours per year and dividing by 2000 to convert to ton per year.

j. Emissions Limitations:

1.72 lbs/hr of NO_x (products of combustion from incinerator)

Owens Corning Medina Roofing Plant

PTI Application: 16-02247

Issued

Facility ID: 1652050040

Emissions Unit ID: T035

7.56 tons per year of NO_x

Applicable Compliance Method:

Compliance with the lbs/hr emission limitation shall be determined by multiplying the maximum input capacity (12 MMBtu/hr) by the AP-42 emission factor for the combustion of fuel oil. Compliance with the annual emission limitation shall be determined by multiplying the short term limitation by 8760 hours per year and dividing by 2000 to convert to tons per year.

VI. Miscellaneous Requirements

1. The following terms and conditions of this permit are federally enforceable: A.I through A.V.

Owen
PTI A

Emissions Unit ID: T035

Issued: To be entered upon final issuance

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>
T035 - Flux Asphalt Storage Tank #46 - 1,700,000 gallon fixed roof storage tank controlled by a PCC thermal incinerator	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

191

Owen:

PTI A

Issued: To be entered upon final issuance

None

Emissions Unit ID: T035

Owen:
PTI A

Emissions Unit ID: T036

Issued: To be entered upon final issuance

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>
T036 - Oxidized Asphalt Storage Tank #69 - 30,000 gallon fixed roof storage tank controlled by a JZ thermal incinerator	OAC rule 3745-31-05(A)(3)

Owen:
PTI A

Emissions Unit ID: T036

Issued: To be entered upon final issuance

		Applicable Emissions <u>Limitations/Control Measures</u>
	40 CFR Part 63, Subpart LLLLL	<p>The requirements of this rule also include compliance with the requirements of OAC rules 3745-21-09(L) and 3745-31- (13) thru (20), and 40 CFR Part 60, Subpart Kb and Subpart UU, and 40 CFR Part 63, Subpart LLLLL.</p> <p>Particulate matter (PM) and particulate matter less than ten microns in diameter (PM-10) emissions shall not exceed 0.01 lb/hr and 0.06 ton per year.</p>
OAC rule 3745-17-07(A) OAC rule 3745-17-11		<p>Sulfur dioxide (SO₂) emissions shall not exceed 0.21 lb/hr.</p> <p>Carbon monoxide (CO) emissions shall not exceed 0.02 lb/hr.</p>
OAC rule 3745-21-09(L)(2)		<p>Volatile organic compound (VOC) emissions shall not exceed 0.05 lb/hr.</p>
OAC rule 3745-3745-31- (13) thru (20)		<p>Hydrogen sulfides (H₂S) emissions shall not exceed 0.007 lb/hr and 0.03 ton per year.</p> <p>The hourly and annual emission limitations outlined are based upon the emission unit's Potential to Emit (PTE). Therefore, no hourly or annual records are required to demonstrate compliance with these limitations.</p>
40 CFR Part 60, Subpart Kb		<p>The overall control efficiency shall not be less than 95% for PM/PM-10 and H₂S.</p>
40 CFR Part 60, Subpart UU		<p>PM emissions from the natural gas combustion of the JZ incinerator controlling emissions units P003 - P005,</p>

**Owen:
PTI A**

Emissions Unit ID: T036

Issued: To be entered upon final issuance

T007 - T009, T026, T029, T031 - T033, T036, and T037 shall not exceed 0.15 pound per hour and 0.64 ton per year.

NO_x emissions from the natural gas combustion of the JZ incinerator controlling emissions units P003 - P005, T007 - T009, T026, T029, T031 - T033, T036, and T037 shall not exceed 1.47 pounds per hour and 6.43 tons per year.

SO₂ emissions from the natural gas combustion of the JZ incinerator controlling emissions units P003 - P005, T007 - T009, T026, T029, T031 - T033, T036, and T037 shall not exceed 3.13 pounds per hour and 13.69 tons per year.

CO emissions from the natural gas combustion of the JZ incinerator controlling emissions units P003 - P005, T007 - T009, T026, T029, T031 - T033, T036, and T037 shall not exceed 0.84 pound per hour and 3.68 tons per year.

OC emissions from the natural gas combustion of the JZ incinerator controlling P003 - P005, T007 - T009, T026, T029, T031 - T033,

T036, and T037 shall not exceed 0.05 pound per hour and 0.24 ton per year.

These emissions limitations specified in these rules are less stringent than the emissions limitations established pursuant to OAC rule 3745-31-05 (A)(3), 40 CFR Part 60, Subpart UU, and 40 CFR Part 63, Subpart LLLLL.

Exempt,
See A.I.2.a below.

The tons per rolling 12-month period shall not exceed:

- CO - 0.07
- VOC - 0.21
- SO₂ - 0.94

The overall control efficiency shall not be less than 95% for CO and VOC

Exempt,
See A.III.1 and A.III.2 below.

Visible emissions to the ambient air shall not exceed 0% opacity, except for one consecutive 15-minute period in any 24-hour period when the transfer lines are being blown for clearing.

Visible emissions to the ambient air shall not exceed 0% opacity for exhaust gases.

The compliance date for this rule is

May 1, 2006.

2. Additional Terms and Conditions

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

II. Operational Restrictions

1. The permittee shall not place, store, or hold in this fixed roof tank any petroleum liquid which, as stored, has a true vapor pressure greater than 11.11 pounds per square inch absolute, unless such tank is designed or equipped in accordance with the requirements of 40 CFR Part 60, Subpart Kb.
2. The average combustion temperature within the thermal incinerator, for any 3-hour block of time when the emissions unit is in operation, shall not be less than 1450 degrees Fahrenheit.
3. The operating pressure range for the vacuum manifold shall be continuously maintained within a range of 2 to 8 inches of water while the emissions unit is in operation.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall keep copies of all records required by this section, except for the record required section A.III.2, for at least 2 years. The record required by section A.III.2 will be kept for the life of the source.
2. The permittee shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel.
3. The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the fume incinerator when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.
4. The permittee shall collect and record the following information for each day:
 - a. all 3-hour blocks of time during which the average combustion temperature within the fume incinerator, when the emissions unit was in operation, was less than 1450 degrees Fahrenheit; and
 - b. a log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.
5. The permittee shall install, operate and maintain a continuous monitor and recorder which measures the pressure in the vacuum manifold while the emissions unit is in operation. The

Issued: To be entered upon final issuance

monitoring equipment and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee. Exceedance of the normal operating pressure range shall require shutdown, investigation of any problems and corrective action to enable operation in the normal range.

6. The permittee shall maintain monthly records which show the date(s) and time(s) when the vacuum manifold pressure falls below normal operating levels. These records shall be kept on site and be made available to the Director, or any authorized representative of the Director, for review during normal business hours.
7. The permittee shall maintain records of the following:
 - a. the types of petroleum liquids stored in the tank; and
 - b. the maximum true vapor pressure (in pounds per square inch absolute), as stored, of each liquid that has a maximum true vapor pressure greater than 2.176 pounds per square inch absolute.
8. The permittee shall maintain monthly records of the following information for this emission unit:
 - a. the CO, VOC, and SO₂ emissions for each month; and
 - b. the rolling, 12-month summation of CO, VOC, and SO₂ emissions.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports which identify all 3-hour blocks of time during which the average combustion temperature within the fume incinerator does not comply with the temperature limitation specified in term A.II.1. This report shall contain, as a minimum, the date, time or occurrence, cause, explanation and corrective action taken for any temperature variations identified.
2. The permittee shall submit quarterly deviation (excursion) reports which identify all times during which the pressure in the vacuum manifold exceeded the normal operating range. This report shall contain, as a minimum, the date, time or occurrence, cause, explanation and corrective action taken for any exceedances identified.
3. The permittee shall submit quarterly deviation (excursion) reports which identify:
 - a. all exceedances of the rolling, 12-month CO, VOC, and SO₂ emissions limitations.

Owens Corning Medina Roofing Plant

PTI Application: 16-02247

Facility ID: 1652050040**Issued**

Emissions Unit ID: T036

4. The quarterly deviation reports shall be submitted in accordance with the reporting requirements as specified in Part I - General Term and Condition A.1.c of this permit.
5. If the permittee places, stores, or holds any petroleum liquid with a true vapor pressure which is greater than 11.11 pounds per square inch absolute and such tank does not comply with 40 CFR Part 60, Subpart Kb, the permittee shall so notify the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days of becoming aware of the occurrence.
6. The permittee shall also submit annual reports which specify the total CO, VOC, and SO₂ emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.

V. Testing Requirements

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

Issued: To be entered upon final issuance

a. Emissions Limitations:

Visible emissions to the ambient air shall not exceed 0% opacity, except for one consecutive 15-minute period in any 24-hour period when the transfer lines are being blown for clearing.

Applicable compliance method:

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, except as provided under OAC rule 3745-17-07(A)(1)(b).

b. Emissions Limitations:

0.01 lb/hr of PM/PM-10
0.06 ton per year of PM/PM-10

Applicable Compliance Methods:

The lb/hr emission limitation was based on the emission unit's potential to emit. The production information used to generate the lb/hr emission calculation is confidential. Compliance with ton per year limitation can be ensured by compliance with the lb/hr limitation.

If required, compliance shall be determined using the following methods:

Methods 1 thru 4 and 5 of 40 CFR Part 60, Appendix A.

c. Emissions Limitations:

0.21 lb/hr of SO₂
0.94 ton per year of SO₂, based upon a rolling 12-month summation.

Applicable Compliance Methods:

The lb/hr emission limitation was based on the emission unit's potential to emit. The production information used to generate the lb/hr emission calculation is confidential. Therefore, no detailed emission calculation can be provided. Compliance with ton per year limitation can be ensured thru record keeping requirements in A.III

Owens Corning Medina Roofing Plant

PTI Application: 16-02247

Issued

Facility ID: 1652050040

Emissions Unit ID: T036

If required, compliance shall be determined using the following methods:

Methods 1 thru 4 and 6 of 40 CFR Part 60, Appendix A.

Issued: To be entered upon final issuance

d. Emissions Limitations:

0.05 lb/hr of VOC

0.21 ton/yr of VOC, based upon a rolling 12-month summation

Applicable Compliance Methods:

The lb/hr emission limitation was based on the emission unit's potential to emit. The production information used to generate the lb/hr emission calculation is confidential. Therefore, no detailed emission calculation can be provided.. Compliance with ton per year limitation can be ensured thru record keeping requirements in A.III

If required, compliance shall be determined using the following methods:

Methods 1 thru 4 and 18 or 25 of 40 CFR Part 60, Appendix A.

e. Emissions Limitations:

0.007 lb/hr of H₂S0.03 ton per year of H₂S

Applicable Compliance Methods:

The lb/hr emission limitation was based on the emission unit's potential to emit. The production information used to generate the lb/hr emission calculation is confidential. Therefore, no detailed emission calculation can be provided. Compliance with tons per year limitation can be ensured by compliance with the lb/hr limitation.

If required, compliance shall be determined using the following methods:

Methods 1 thru 4 and 15 of 40 CFR Part 60, Appendix A.

f. Emissions Limitations:

0.15 lb/hr of PM (products of combustion from incinerator)

0.64 ton per year of PM

Applicable Compliance Methods:

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

201

Owen:

PTI A

Emissions Unit ID: T036

Issued: To be entered upon final issuance

determined by multiplying the short term limitation by 8760 hours per year and dividing by 2000 to convert to ton per year.

Issued: To be entered upon final issuance

g. Emissions Limitations:

0.84 lb/hr of CO (products of combustion from incinerator)
3.68 tons per year of CO

Applicable Compliance Methods:

Compliance with the lb/hr emission limitation shall be determined by multiplying the maximum input capacity (10.2 MMBtu/hr) by the AP-42 emission factor for the combustion of natural gas. Compliance with the annual emission limitation shall be determined by multiplying the short term limitation by 8760 hours per year and dividing by 2000 to convert to tons per year.

h. Emissions Limitations:

3.13 lbs/hr of SO₂ (products of combustion from incinerator)
13.69 tons per year of SO₂

Applicable Compliance Methods:

Compliance with the lbs/hr emission limitation shall be determined by multiplying the maximum input capacity (10.2 MMBtu/hr) by the AP-42 emission factor for the combustion of fuel oil. Compliance with the annual emission limitation shall be determined by multiplying the short term limitation by 8760 hours per year and dividing by 2000 to convert to tons per year.

i. Emissions Limitations:

0.05 lb/hr of VOC (products of combustion from incinerator)
0.24 tpy VOC

Applicable Compliance Methods:

Compliance with the lbs/hr emission limitation shall be determined by multiplying the maximum input capacity (10.2 MMBtu/hr) by the AP-42 emission factor for the combustion of natural gas. Compliance with the annual emission limitation shall be determined by multiplying the short term limitation by 8760 hours per year and dividing by 2000 to convert to tons per year.

j. Emissions Limitations:

203

Owen

PTI A

Emissions Unit ID: T036

Issued: To be entered upon final issuance

1.47 lb/hr of NO_x (products of combustion from incinerator)

6.43 tons per year of NO_x

Owen:

PTI A

Emissions Unit ID: T036

Issued: To be entered upon final issuance

Applicable Compliance Method:

Compliance with the lb/hr emission limitation shall be determined by multiplying the maximum input capacity (10.2 MMBtu/hr) by the AP-42 emission factor for the combustion of fuel oil. Compliance with the annual emission limitation shall be determined by multiplying the short term limitation by 8760 hours per year and dividing by 2000 to convert to tons per year.

VI. Miscellaneous Requirements

1. The following terms and conditions of this permit are federally enforceable: A.I through A.V.

Owen
PTI A

Emissions Unit ID: T036

Issued: To be entered upon final issuance

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>
T036 - Flux Asphalt Storage Tank #69 - 30,000 gallon fixed roof storage tank controlled by a JZ thermal incinerator	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

206

Owens Corning Medina Roofing Plant

PTI Application: 16-02347

Issued

Facility ID: 1652050040

Emissions Unit ID: T036

None

Owen
PTI A

Emissions Unit ID: T037

Issued: To be entered upon final issuance

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>
T037 - Oxidized Asphalt Storage Tank #70 - 60,000 gallon fixed roof storage tank controlled by a JZ thermal incinerator	OAC rule 3745-31-05(A)(3)

Owen:
PTI A

Emissions Unit ID: T037

Issued: To be entered upon final issuance

		Applicable Emissions <u>Limitations/Control Measures</u>
<p>OAC rule 3745-17-07(A) OAC rule 3745-17-11</p>	<p>40 CFR Part 63, Subpart LLLLL</p>	<p>The requirements of this rule also include compliance with the requirements of OAC rules 3745-21-09(L) and 3745-31- (13) thru (20) and 40 CFR Part 60, Subpart Kb and Subpart UU and 40 CFR Part 63, Subpart LLLLL.</p>
<p>OAC rule 3745-21-09(L)</p>		<p>Particulate matter (PM) and particulate matter less than ten microns in diameter (PM-10) emissions shall not exceed 0.01 lb/hr and 0.06 ton per year.</p>
<p>OAC rule 3745-3745-31- (13) thru (20)</p>		<p>Sulfur dioxide (SO₂) emissions shall not exceed 0.21 lb/hr.</p>
<p>40 CFR Part 60, Subpart Kb</p>		<p>Carbon monoxide (CO) emissions shall not exceed 0.02 lb/hr.</p>
<p>40 CFR Part 60, Subpart UU</p>		<p>Volatile organic compound (VOC) emissions shall not exceed 0.05 lb/hr.</p>
		<p>Hydrogen sulfides (H₂S) emissions shall not exceed 0.007 lb/hr and 0.03 ton per year.</p>
		<p>The hourly and annual emission limitations outlined are based upon the emission unit's Potential to Emit (PTE). Therefore, no hourly or annual records are required to demonstrate compliance with these limitations.</p>
		<p>The overall control efficiency shall not be less than 95% for PM/PM-10 and H₂S.</p>
		<p>PM emissions from the natural gas combustion of the JZ incinerator controlling emissions units P003 - P005,</p>

Owen:**PTI A**

Emissions Unit ID: T037

Issued: To be entered upon final issuance

T007 - T009, T026, T029, T031 - T033, T036, and T037 shall not exceed 0.15 pound per hour and 0.64 ton per year.

NO_x emissions from the natural gas combustion of the JZ incinerator controlling emissions units P003 - P005, T007 - T009, T026, T029, T031 - T033, T036, and T037 shall not exceed 1.47 pounds per hour and 6.43 tons per year.

SO₂ emissions from the natural gas combustion of the JZ incinerator controlling emissions units P003 - P005, T007 - T009, T026, T029, T031 - T033, T036, and T037 shall not exceed 3.13 pounds per hour and 13.69 tons per year.

CO emissions from the natural gas combustion of the JZ incinerator controlling emissions units P003 - P005, T007 - T009, T026, T029, T031 - T033, T036, and T037 shall not exceed 0.84 pound per hour and 3.68 tons per year.

OC emissions from the natural gas combustion of the JZ incinerator controlling P003 - P005, T007 - T009, T026, T029, T031 - T033,

T036, and T037 shall not exceed 0.05 pound per hour and 0.24 ton per year.

These emissions limitations specified by these rules are less stringent than the emissions limitations established pursuant to OAC rule 3745-31-05 (A)(3), 40 CFR Part 60, Subpart UU, and 40 CFR Part 63, Subpart LLLLLL.

See A.II.a below.

The tons per rolling 12-month period shall not exceed:

CO - 0.07
VOC - 0.21
SO₂ - 0.94.

The overall control efficiency shall not be less than 95% for CO and VOC.

See A.I.2.a below.

Visible emissions to the ambient air shall not exceed 0% opacity, except for one consecutive 15-minute period in any 24-hour period when the transfer lines are being blown for clearing.

Exempt per 40 CFR 63.8681(c) since subject to 40 CFR Part 60, Subpart Kb.

2. Additional Terms and Conditions

- 2.a** The permittee shall install a closed vent system and control device meeting the following specifications:
- i. the closed vent system shall be designed to collect all VOC vapors and gases discharged from the storage vessel and operated with no detectable emissions as specified by an instrument reading of less than 500 ppm above background and visual inspections as determined in paragraph 60.485(b); and
 - ii. the control device shall be designed and operated to reduce inlet VOC emissions by 95% or greater.

II. Operational Restrictions

1. The permittee shall not place, store, or hold in this fixed roof tank any petroleum liquid which, as stored, has a true vapor pressure greater than 1.52 pounds per square inch absolute, unless such tank is designed or equipped in accordance with the requirements of paragraph (L)(1) or OAC rule 3745-21-09.
2. The average combustion temperature within the thermal incinerator, for any 3-hour block of time when the emissions unit is in operation, shall not be less than 1450 degrees Fahrenheit.
3. The operating pressure range for the vacuum manifold shall be continuously maintained within a range of 2 to 8 inches of water while the emissions unit is in operation.

III. Monitoring and/or Record keeping Requirements

1. The permittee shall keep copies of all records required by this section, except for the record required section A.III.2, for at least 2 years. The record required by section A.III.2 will be kept for the life of the source.
2. The permittee shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel.
3. The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the fume incinerator when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.
4. The permittee shall collect and record the following information for each day:
 - a. all 3-hour blocks of time during which the average combustion temperature within the

Issued: To be entered upon final issuance

fume incinerator, when the emissions unit was in operation, was less than 1450 degrees Fahrenheit; and

- b. a log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.
5. The permittee shall install, operate and maintain a continuous monitor and recorder which measures the pressure in the vacuum manifold while the emissions unit is in operation. The monitoring equipment and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee. Exceedance of the normal operating pressure range shall require shutdown, investigation of any problems and corrective action to enable operation in the normal range.
 6. The permittee shall maintain monthly records which show the date(s) and time(s) when the vacuum manifold pressure falls below normal operating levels. These records shall be kept on site and be made available to the Director, or any authorized representative of the Director, for review during normal business hours.
 7. The permittee shall maintain records of the following:
 - a. the types of petroleum liquids stored in the tank;
 - b. the period of storage; and
 - c. the maximum true vapor pressure (in pounds per square inch absolute), as stored, of each liquid.
 8. The permittee shall maintain monthly records of the following information for this emission unit:
 - a. the CO, VOC, and SO₂ emissions for each month; and
 - b. the rolling, 12-month summation of CO, VOC, and SO₂ emissions.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports which identify all 3-hour blocks of time during which the average combustion temperature within the fume incinerator does not comply with the temperature limitation specified in term A.II.1. This report shall contain, as a minimum, the date, time or occurrence, cause, explanation and corrective action taken for any temperature variations identified.

Issued

Emissions Unit ID: T037

2. The permittee shall submit quarterly deviation (excursion) reports which identify all times during which the pressure in the vacuum manifold exceeded the normal operating range. This report shall contain, as a minimum, the date, time or occurrence, cause, explanation and corrective action taken for any exceedances identified.
3. The permittee shall submit quarterly deviation (excursion) reports which identify:
 - a. all exceedances of the rolling, 12-month CO, VOC, and SO₂ emissions limitations.
4. The quarterly deviation reports shall be submitted in accordance with the reporting requirements as specified in Part I - General Term and Condition A.1.c of this permit.
5. If the permittee places, stores, or holds any petroleum liquid with a true vapor pressure which is greater than 1.52 pounds per square inch absolute and such tank does not comply with OAC rule 3745-21-09(L)(1), the permittee shall so notify the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days of becoming aware of the occurrence.
6. After installing the control equipment required in section A.I.2.a, the permittee shall submit a report to the Administrator that certifies that the control equipment meets the specifications of paragraph 60.112b(a)(2) and 60.113b(b)(2), (b)(3), and (b)(4). This report shall be an attachment to the notification required by paragraph 60.7(a)(3).
7. The permittee shall also submit annual reports which specify the total CO, VOC, and SO₂ emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.

V. Testing Requirements

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

Visible emissions to the ambient air shall not exceed 0% opacity, except for one consecutive 15-minute period in any 24-hour period when the transfer lines are being blown for clearing.

Applicable compliance method:

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, except as provided under OAC rule 3745-17-07(A)(1)(b).

Issued: To be entered upon final issuance

b. Emissions Limitations:

0.01 lb/hr of PM/PM-10
0.06 ton per year of PM/PM-10

Applicable Compliance Methods:

The lb/hr emission limitation was based on the emission unit's potential to emit. The production information used to generate the lb/hr emission calculation is confidential. Therefore, no detailed emission calculation can be provided. Compliance with ton per year limitation can be ensured by compliance with the lb/hr limitation.

If required, compliance shall be determined using the following methods:

Methods 1 thru 4 and 5 of 40 CFR Part 60, Appendix A.

c. Emissions Limitations:

0.21 lb/hr of SO₂
0.94 ton per year of SO₂, based upon a rolling, 12-month summation

Issued: To be entered upon final issuance

Applicable Compliance Method:

The lb/hr emission limitation was based on the emission unit's potential to emit. The production information used to generate the lb/hr emission calculation is confidential. Therefore, no detailed emission calculation can be provided. Compliance with ton per year limitation can be ensured thru record keeping requirements in A.III

If required, compliance shall be determined using the following methods:

Methods 1 thru 4 and 6 of 40 CFR Part 60, Appendix A.

d. Emissions Limitations:

0.05 lb/hr of VOC

0.21 ton per year of VOC, based upon a rolling, 12-month summation

Applicable Compliance Methods:

The lb/hr emission limitation was based on the emission unit's potential to emit. The production information used to generate the lb/hr emission calculation is confidential. Therefore, no detailed emission calculation can be provided. Compliance with ton per year limitation can be ensured thru record keeping requirements in A.III

If required, compliance shall be determined using the following methods:

Methods 1 thru 4 and 18 or 25 of 40 CFR Part 60, Appendix A.

e. Emissions Limitations:

0.001 lb/hr of H₂S

0.03 ton per year of H₂S

Applicable Compliance Methods:

The lb/hr emission limitation was based on the emission unit's potential to emit. The production information used to generate the lb/hr emission calculation is confidential. Therefore, no detailed emission calculation can be provided. Compliance with ton per year limitation can be ensured by compliance with the lb/hr limitation.

If required, compliance shall be determined using the following methods:

215

Owens Corning Medina Roofing Plant

PTI Application: 16-02347

Issued

Facility ID: 1652050040

Emissions Unit ID: T037

Methods 1 thru 4 and 15 of 40 CFR Part 60, Appendix A.

Issued: To be entered upon final issuance

f. Emissions Limitations:

0.02 lb/hr of CO

0.07 ton per year of CO, based upon a rolling, 12-month summation

Applicable Compliance Methods:

The lb/hr emission limitation was based on the emission unit's potential to emit. The production information used to generate the lb/hr emission calculation is confidential. Therefore, no detailed emission calculation can be provided. Compliance with ton per year limitation can be ensured thru record keeping requirements in A.III

If required, compliance shall be determined using the following methods:

Methods 1 thru 4 and 10 of 40 CFR Part 60, Appendix A.

g. Emissions Limitations:

0.15 lb/hr of PM (products of combustion from incinerator)

0.64 ton per year of PM

Applicable Compliance Methods:

Compliance with the lb/hr emission limitation shall be determined by multiplying the maximum input capacity (10.2 MMBtu/hr) by the AP-42 emission factor for the combustion of fuel oil. Compliance with the annual emission limitation shall be determined by multiplying the short term limitation by 8760 hours per year and dividing by 2000 to convert to ton per year.

h. Emissions Limitations:

0.84 lb/hr of CO (products of combustion from incinerator)

3.68 tons per year of CO

Applicable Compliance Method:

Compliance with the lb/hr emission limitation shall be determined by multiplying the maximum input capacity (10.2 MMBtu/hr) by the AP-42 emission factor for the combustion of natural gas. Compliance with the annual emission limitation shall be determined by multiplying the short term limitation by 8760 hours per year and dividing by 2000 to convert to tons per year.

217

Owen

PTI A

Issued: To be entered upon final issuance

Emissions Unit ID: T037

Issued: To be entered upon final issuance

i. Emissions Limitations:

3.13 lbs/hr of SO₂ (products of combustion from incinerator)
13.69 tons per year of SO₂

Applicable Compliance Methods:

Compliance with the lbs/hr emission limitation shall be determined by multiplying the maximum input capacity (10.2 MMBtu/hr) by the AP-42 emission factor for the combustion of fuel oil. Compliance with the annual emission limitation shall be determined by multiplying the short term limitation by 8760 hours per year and dividing by 2000 to convert to tons per year.

j. Emissions Limitations:

0.05 lb/hr VOC (products of combustion from incinerator)
0.24 ton per year of VOC

Applicable Compliance Methods:

Compliance with the lb/hr emission limitation shall be determined by multiplying the maximum input capacity (10.2 MMBtu/hr) by the AP-42 emission factor for the combustion of natural gas. Compliance with the annual emission limitation shall be determined by multiplying the short term limitation by 8760 hours per year and dividing by 2000 to convert to ton per year.

k. Emissions Limitations:

1.47 lbs/hr of NO_x (products of combustion from incinerator)
6.43 tons per year of NO_x

Applicable Compliance Method:

Compliance with the lbs/hr emission limitation shall be determined by multiplying the maximum input capacity (10.2 MMBtu/hr) by the AP-42 emission factor for the combustion of fuel oil. Compliance with the annual emission limitation shall be determined by multiplying the short term limitation by 8760 hours per year and dividing by 2000 to convert to tons per year.

VI. Miscellaneous Requirements

Owens Corning Medina Roofing Plant

PTI Application: 16-02247

Issued

Facility ID: 1652050040

Emissions Unit ID: T037

1. The following terms and conditions of this permit are federally enforceable: A.I through A.V.

Owen
PTI A

Emissions Unit ID: T037

Issued: To be entered upon final issuance

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>
T037 - Oxidized Asphalt Storage Tank #70 - 60,000 gallon fixed roof storage tank controlled by a JZ thermal incinerator	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

221

Owen:

PTI A

Issued: To be entered upon final issuance

None

Emissions Unit ID: T037

Owen
PTI A

Emissions Unit ID: T038

Issued: To be entered upon final issuance

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>	40 CFR Part 60, Subpart Kb
T038 - Mineral Spirits Storage Tank #68 - 20,000 gallon fixed roof storage tank controlled by a condenser	OAC rule 3745-31-05(A)(3)	
	OAC rule 3745-21-09(L)(2)	
	OAC rule 3745-3745-31- (13) thru (20)	

223

Owen:

PTI A

Emissions Unit ID: T038

Issued: To be entered upon final issuance

Applicable Emissions

Limitations/Control

Measures

The requirements of this rule also include compliance with the requirements of OAC rules 3745-21-09(L), 3745-31- (13) thru (20), 3745-31-05(C), and 40 CFR Part 60, Subpart Kb.

Volatile organic compound (VOC) emissions shall not exceed 0.003 lb/hr.

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

Exempt,
See A.I.2.a below.

The tons per rolling 12-month period shall not exceed:

VOC - 0.01

The overall control efficiency shall not be less than 85% for VOC

Exempt,
See A.III.1 and A.III.2 below.

224

Owen

PTI A

Issued: To be entered upon final issuance

Emissions Unit ID: T038

Issued: To be entered upon final issuance**2. Additional Terms and Conditions**

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

II. Operational Restrictions

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

The permittee is not required to operate the condenser during mineral spirit unloading when the ambient temperature is less than 45 degrees F.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall keep copies of all records required by this section, except for the record required section A.III.2, for at least 2 years. The record required by section A.III.2 will be kept for the life of the source.
2. The permittee shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel.
3. The permittee shall properly install and maintain equipment to continuously monitor and record the water temperature exiting the condenser while the emissions unit is in operation. The temperature monitor and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

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

- a. the outlet water temperature, on a once/shift basis; and
 - b. a log or record of operating time for the capture (collection) system, control device, monitoring equipment, associated emissions unit and ambient temperature.
4. The permittee shall maintain records of the following:
 - a. the types of petroleum liquids stored in the tank; and
 - b. the maximum true vapor pressure (in pounds per square inch absolute), as stored, of each liquid that has a maximum true vapor pressure greater than 2.176 pounds per square inch absolute.

IV. Reporting Requirements

1. The permittee shall submit outlet water temperature and ambient temperature quarterly deviation (excursion) reports that identify all periods of time during which the water temperature exiting the condenser and ambient temperature did not comply with the temperature requirements specified above.
2. The quarterly deviation reports shall be submitted in accordance with the reporting requirements as specified in Part I - General Term and Condition A.1.c of this permit.
3. If the permittee places, stores, or holds any petroleum liquid with a true vapor pressure which is greater than 11.11 pounds per square inch absolute and such tank does not comply with 40 CFR Part 60, Subpart Kb, the permittee shall so notify the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days of becoming aware of the occurrence.
4. The permittee shall also submit annual reports which specify the total VOC emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.

V. Testing Requirements

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

- a. Emission Limitation:

0.003 lb/hr of VOC

0.01 ton/yr VOC, based upon a rolling, 12-month summation

Applicable Compliance Method:

The lb/hr emission limitation was based on the emission unit's potential to emit. The production information used to generate the lb/hr emission calculation is confidential. Therefore, no detailed emission calculation can be provided. Compliance with ton per year limitation can be ensured by compliance with the lb/hr limitation.

If required, compliance shall be determined using the following methods:

Methods 1 thru 4 and 18 or 25 of 40 CFR Part 60, Appendix A.

VI. Miscellaneous Requirements

1. The following terms and conditions of this permit are federally enforceable: A.I through A.V.

Owen
PTI A

Emissions Unit ID: T038

Issued: To be entered upon final issuance

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>
T038 - Mineral Spirits Storage Tank #68 - 20,000 gallon fixed roof storage tank controlled by a condenser	OAC rule 3745-31-05	None

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Record keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

228

Owen:

PTI A

Issued: To be entered upon final issuance

None

Emissions Unit ID: T038