April 27, 2021

Via email to: caleb.wagner@owenscorning.com
roger.t.watson@owenscorning.com & First Class Mail

Caleb Wagner
EHS Leader
Owens Corning Non-Woven Technology, LLC
5520 Planters Road
Fort Smith, AR 72916

Re: Notice of Final Permitting Decision; Permit No. 0747-AOP-R6

Dear Mr. Wagner,

After considering the application, any public comments, and other applicable materials as required by APC&EC Reg.8.211 and Ark. Code Ann. § 8-4-101 *et seq*., this notice of final permitting decision is provided for:

> Owens Corning Non-Woven Technology, LLC
> 5520 Planters Road
> Fort Smith, AR 72916
>
> Permit Number: 0747-AOP-R6
>
> Permitting Decision: approval with permit conditions as set forth in final Permit No. 0747-AOP-R6
>
> Accessing the Permitting Decision and Response to Comments, if any:
> https://www.adeq.state.ar.us/downloads/WebDatabases/PermitsOnline/Air/0747-AOP-R6.pdf.
>
> Accessing the Statement of Basis:
> https://www.adeq.state.ar.us/downloads/WebDatabases/PermitsOnline/Air/0747-AOP-R6-SOB.pdf.

The permitting decision is effective on the date stated in the attached Certificate of Service unless a Commission review has been properly requested under Arkansas Pollution Control & Ecology Commission's Administrative Procedures, Regulation No. 8, within thirty (30) days after service of this decision.

The applicant or permittee and any other person submitting public comments on the record may request an adjudicatory hearing and Commission review of the final permitting decisions as

provided under Chapter Six of Regulation No. 8. Such a request shall be in the form and manner required by Reg.8.603, including filing a written Request for Hearing with the Commission secretary at 3800 Richards Rd, North Little Rock, Arkansas 72117. If you have any questions about filing the request, please call the Commission at 501-682-7890.

This permit is your authority to construct, operate, and maintain the equipment and control apparatus as set forth in your application initially received on 10/21/2019.

Sincerely,

William K. Montgomery
Associate Director, Office of Air Quality, Division of Environmental Quality
5301 Northshore Drive, North Little Rock, AR 72118-5317

Enclosure: Certificate of Service

CERTIFICATE OF SERVICE

I, Cynthia Hook, hereby certify that the final permit decision notice has been mailed by first class mail to Owens Corning Non-Woven Technology, LLC, 5520 Planters Road, Fort Smith, AR, 72916, on this 27th day of April, 2021.

Cynthia Hook, AA, Office of Air Quality

RESPONSE TO COMMENTS

OWENS CORNING NON-WOVEN TECHNOLOGY, LLC
PERMIT #0747-AOP-R6
AFIN: 66-00294

On January 22, 2021 and January 24, 2021, the Director of the Arkansas Division of Environmental Quality gave notice of a draft permitting decision for the above referenced facility. On February 17, 2021, written comments on the draft permitting decision were submitted on behalf of the facility by emailing the comments to airpermits@adeq.state.ar.us. The Division's response to these issues follows.

Note: The following page numbers and condition numbers refer to the draft permit. These references may have changed in the final permit based on changes made during the comment period.

Comment #1:
SN-01, Oven Vapor Incinerator (Thermal Oxidizer), on Line #1 has an opacity limit of 20%. Based on the cited regulations in the conditions below (which state 20%), it's not clear why opacity is limited to 5% in the following conditions. There is no underlying regulatory requirement that it should be 5%. Owens Corning requests that opacity limits for these sources (SN-11 and SN-14) be set at 20%.

Response to Comment #1:
The opacity limits for sources SN-11 and SN-14 will remain at 5%. Regulation 19, §19.503 sets a not-to-be-exceeded opacity limit of 20%, which by means an opacity value can be set less than or equal to 20%. The rule is not intended to set specific opacity limits for each and every type of emission source. A properly functioning regenerative thermal oxidizer (RTO) can reasonably meet an opacity limit of 5%.

Comment #2:
Owens Corning requests that the following changes be made to [Plantwide] Condition 16:

- Remove the stack testing requirement for PM/PM_{10} for SN-11 because the RTO is fueled by natural gas combustion and emissions of VOCs and organic HAPs will be controlled by the RTO under the MACT standard (for formaldehyde);
- Remove the stack testing requirement for VOCs from SN-12, SN-13, and SN-14 since organic HAPs will be tested (organic HAP limits established by air dispersion modeling);
- Remove all of the stack testing requirements for SN-13, Binder Room, because this is a wall vent located at a height of 40 feet in the air; and
- Remove the stack testing requirement for PM/PM_{10} for SN-14, Waste Trim Dust Collector, because emissions of PM/PM_{10} are very small and controlled.

Response to Comment #2:
The stack testing requirements for SN-11, SN-12, SN-13, and SN-14 will not be removed at this time from Plantwide Condition #16. As stated in Plantwide Condition #16, the purpose of the initial stack testing is to verify the emission rates. The submitted emission calculations are based

on engineering estimations of a new design and not actual stack test data, hence, the purpose of Plantwide Condition #16.

Comment #3:
Owens Corning requests that the following changes be made to [Plantwide] Condition 17:

- Remove the stack testing requirement for VOCs from SN-12, SN-13, and SN-14 since organic HAPs will be tested (organic HAP limits established by air dispersion modeling); and
- Remove all of the stack testing requirements for SN-13, Binder Room, and SN-14, Waste Trim Dust Collector, from five year testing because these emissions are relatively small and uncontrolled.

Response to Comment #3:
The stack testing requirements for SN-12, SN-13, and SN-14 will not be removed at this time from Plantwide Condition #17. The collective quantity of VOC and HAP emissions estimated to be emitted from SN-12, SN-13, and SN-14 is substantial and is currently based on engineering estimations of a new design and not actual stack test data.

Comment #4:
According to our calculations, the permitted emission increase for VOCs should be shown as 31.5 tpy rather than 28.1 tpy.

Response to Comment #4:
After review of calculations, the permitted emission increase for VOCs shown in the introduction was changed from 28.1 tpy to 31.5 tpy.

DIVISION OF ENVIRONMENTAL QUALITY

OPERATING AIR PERMIT

PERMIT NUMBER: 0747-AOP-R6

IS ISSUED TO:
Owens Corning Non-Woven Technology, LLC
5520 Planters Road
Fort Smith, AR 72916
Sebastian County
AFIN: 66-00294

PURSUANT TO THE REGULATIONS OF THE ARKANSAS OPERATING AIR PERMIT PROGRAM, REGULATION 26: THIS PERMIT AUTHORIZES THE ABOVE REFERENCED PERMITTEE TO INSTALL, OPERATE, AND MAINTAIN THE EQUIPMENT AND EMISSION UNITS DESCRIBED IN THE PERMIT APPLICATION AND ON THE FOLLOWING PAGES. THIS PERMIT IS VALID BETWEEN:

January 27, 2020 AND January 26, 2025

THE PERMITTEE IS SUBJECT TO ALL LIMITS AND CONDITIONS CONTAINED HEREIN.

Signed:

William K. Montgomery
Associate Director, Office of Air Quality
Division of Environmental Quality

April 27, 2021
Date

Table of Contents

List of Acronyms and Abbreviations

Ark. Code Ann.	Arkansas Code Annotated
AFIN	Arkansas DEQ Facility Identification Number
C.F.R.	Code of Federal Regulations
CO	Carbon Monoxide
COMS	Continuous Opacity Monitoring System
HAP	Hazardous Air Pollutant
Hp	Horsepower
lb/hr	Pound Per Hour
NESHAP	National Emission Standards (for) Hazardous Air Pollutants
MVAC	Motor Vehicle Air Conditioner
No.	Number
NO_x	Nitrogen Oxide
NSPS	New Source Performance Standards
PM	Particulate Matter
PM_{10}	Particulate Matter Equal To Or Smaller Than Ten Microns
$PM_{2.5}$	Particulate Matter Equal To Or Smaller Than 2.5 Microns
SNAP	Significant New Alternatives Program (SNAP)
SO_2	Sulfur Dioxide
SSM	Startup, Shutdown, and Malfunction Plan
Tpy	Tons Per Year
UTM	Universal Transverse Mercator
VOC	Volatile Organic Compound

SECTION I: FACILITY INFORMATION

PERMITTEE:	Owens Corning Non-Woven Technology, LLC
AFIN:	66-00294
PERMIT NUMBER:	0747-AOP-R6
FACILITY ADDRESS:	5520 Planters Road Fort Smith, AR 72916
MAILING ADDRESS:	5520 Planters Road Fort Smith, AR 72916
COUNTY:	Sebastian County
CONTACT NAME:	Caleb Wagner
CONTACT POSITION:	EHS Leader
TELEPHONE NUMBER:	(479) 648-5327
REVIEWING ENGINEER:	Jeremy Antipolo
UTM North South (Y):	Zone 15: 3907621.15 m
UTM East West (X):	Zone 15: 375347.3 m

SECTION II: INTRODUCTION

Summary of Permit Activity

Owens Corning owns and operates a fiberglass mat manufacturing facility at 5520 Planters Road in Fort Smith, Arkansas 72916. The facility uses chopped fiberglass and a chemical binder to produce fiberglass mats primarily for use in the roofing products industry. With this Title V significant modification, the facility has requested to construct and operate an additional fiberglass mat manufacturing facility (Line #2) adjacent to the existing Owens Corning facility (Line #1). The proposed facility will have similar, but not identical operations to Line #1. Owens Corning currently plans to eventually move all production to Line #2. After the construction of Line #2 is complete and the facility starts up, a transition period of 12 months will begin. Changes to the permit include the addition of the following:

1. Five new sources: Regenerative Thermal Oxidizer (SN-11), Former/Saturator and Fugitive Emissions and Wet End Building Exhaust (SN-12), Binder Room (SN-13), Waste Trim Dust Collector (SN-14), and a Diesel-Fired Emergency Fire Pump (SN-15);
2. Plantwide Conditions #10 through #14 (describing compliance during transition to Line #2);
3. Plantwide Condition #17 (describing initial stack testing of sources associated with Line #2 (SN-11, SN-12, SN-13 and SN-14);
4. Plantwide Condition #18 describes periodic stack testing for sources associated with Line #2 (SN-11, SN-12, SN-13 and SN-14).

Permitted emission increases associated with this permit modification are 39.6 tpy $PM_{2.5}$, 31.5 tpy VOC, 17.1 tpy NO_x, and 7.35 tpy Methanol.

Process Description

Existing Facility (Line #1) Process Description

The fiberglass mat manufacturing process begins in the fiber preparation area. Chopped glass fibers, delivered to the site in containers, are fed into the glass bins, weighed out, and fed into the pulper on conveyor belts. In the pulper, glass fibers, white water (recycled), dispersant, ammonia, and viscosity modifier are mixed in controlled amounts and agitated to disperse the glass fibers and create “thick stock”. Once the thick stock batch is complete, the pulper contents are pumped to the holding chest and another batch of thick stock begins.

The holding chest agitates the thick stock to continue the dispersion of the glass fibers. From the holding chest, the thick stock is pumped to the constant level chest and then to the Deltaformer silo. The thick stock is then pumped through the fan pump to the distributor header and into the headbox where it is deposited on a moving wire screen. Excess liquid is removed from the screen through drainage and vacuum and is returned to the process (as white water). The air from the vacuum lines is routed through a series of moisture separators to remove entrained

water vapor prior to venting to the atmosphere (SN-03). The fibers remaining on the screen form a mat which is transferred to another conveyor in the binder application section.

The urea-formaldehyde resin is used to make the binder and is applied to the glass fiber mat to allow the glass fibers to form a cohesive mat. The binder used in the process is a blend of several components mixed in the binder room. The ingredients are delivered to the site in a variety of ways, including tank trucks, drums, and bags. High-volume ingredients are stored in permanent tanks, while minor ingredients are stored in drums or totes. The components are mixed together in the binder mix tank according to a binder recipe, which yields the properties desired for the final product.

From the binder mix tank, the binder enters the binder circulation system, which continuously cycles binder circulation tanks. The binder is then pumped from the circulation tanks to the binder seal tank and binder applicator. Excess binder is recovered from the application and is pumped back to the circulation tanks where the cycle begins again. Emissions from the binder mix tank and the binder circulation tanks are collected and vented together (SN-05).

The binder is applied using a flooding weir. Excess binder is removed and recirculated by a combination of natural drainage and vacuum slots. The air from the vacuum lines is routed through a series of moisture separators to remove entrained liquid prior to venting to the atmosphere (SN-04). Fugitive emissions from the mat line exhaust through roof vents over the production line (SN-07).

The mat saturated with binder is conveyed to an oven where the binder is dried and cured. Heating in the oven is provided by the combustion of natural gas. VOC emissions from the drying/curing oven are controlled with a thermal oxidizer (SN-01). Heat from incinerated vapors can be recovered through a waste heat boiler (SN-02) to provide steam for plant operations.

The cured mat is trimmed, rolled, and packaged prior to storage in the warehouse. Mat trimmings are conveyed pneumatically to the drop-out box. Conveying air exhausts from the sides of a drop-out box (insignificant activity), and the trimmings are fed to a compactor.

The wastewater from the process is routed to the wastewater treatment equipment. The formaldehyde emissions from this source have been determined to be insignificant. The treated wastewater is then piped to the city wastewater treatment plant.

Proposed Facility (Line #2) Process Description

The fiberglass mat manufacturing process begins in the fiber preparation area. Chopped glass fibers, delivered to the site in containers, are fed into glass bins, weighed, and then fed into the pulper on conveyor belts. In the pulper, glass fibers and other raw materials are mixed in controlled amounts and agitated to disperse the glass fibers and create a thick stock. After the thick stock batch is complete, the pulper contents are pumped to the holding chest, and another batch of thick stock will begin.

The holding chest will agitate the thick stock to continue the dispersion of the glass fibers. From the holding chest, the thick stock is pumped to the constant level chest and then to the Former silo. The thick stock is then pumped through the fan pump to the distributor header and into the headbox, where it is deposited on a moving wire screen. Excess liquid is removed from the screen through drainage and vacuum and is returned to the process as white water. The air from the Former/Saturator Vacuum System lines (Suction Tube Hydroformer, Dry Suction Vacuum, and White Water Vacuum Pump) (SN-12) is routed through a series of moisture separators to remove entrained water prior to venting through the RTO stack, without control for better dispersion. The fibers remaining on the screen will form a mat, which is transferred to another conveyor in the binder application section. A resin will be applied to the glass fiber mat, serving as a binder to allow the glass fibers to form a cohesive mat.

The binder used in the process is a blend of several components mixed in the binder room. The ingredients are delivered to the site in a variety of ways, including tank trucks, drums, and bags. High volume ingredients will be stored in permanent tanks, while minor ingredients are stored in drums or totes. The components are mixed together in the binder mix tank according to a binder recipe, which yields the properties desired for the final product.

From the binder mix tanks, the binder enters the binder circulation system, which continuously cycles binder throughout the process as follows. Binder is initially pumped from the mix tank into the binder circulation tanks. The binder is then pumped from the circulation tanks to the binder seal tank and the binder applicator. Excess binder is recovered from the application area and pumped back to the circulation tanks, where the cycle will begin again. Emissions from the binder mix tanks and the binder circulation tanks are collected and vented together from the Binder Room (SN-13).

The binder is applied using a flooding weir. Excess binder is removed and recirculated by a combination of natural drainage and vacuum slots. The air from the vacuum lines (the Binder Applicator Fan, the Binder Control Fan, and the Transfer Roll Vacuum Fan) is routed through a series of moisture separators to remove entrained liquid prior to venting through the RTO stack, without control (SN-12) for better dispersion. In addition, fugitive emissions from the mat line are not exhausted through roof vents over the production line, but are rather collected and vented to the atmosphere through the RTO stack, without control (SN-12) for better dispersion. The mat saturated with binder is conveyed to an oven, where the binder is dried and cured. Heating in the oven is provided by the combustion of natural gas. Emissions from the Curing/Drying Oven, the Pick-Up Roll Vacuum Fan, and the Oven Outlet Hood will be controlled by the RTO prior to being emitted to the atmosphere (SN-11).

As mentioned above, other emissions from the process and fugitive emissions from the building are not controlled by the RTO, but will be routed to the RTO stack, without control (SN-12).

The cured mat is trimmed, rolled, and packaged prior to storage in the warehouse. Mat trimmings are conveyed pneumatically to the Waste Trimmer Dust Collector. Conveying air exhausts from the Waste Trimmer Dust Collector (SN-14), and the trimmings are fed into a compactor.

Wastewater from the process is routed to the existing wastewater treatment equipment (SN-09). The formaldehyde emissions from this source have been determined to be insignificant. The treated wastewater is then routed to the City of Fort Smith wastewater treatment plant.

Other emission sources from the facility include a diesel-fired emergency fire pump engine (SN-15), a Quality Laboratory, and other insignificant support activities.

Owens Corning plans to operate the existing Planters Road facility while the proposed process is brought online. After completion of the proposed project, Owens Corning proposes to operate both facilities for a short time (365 days or less) until the new facility becomes operational. After Line #2 starts up, the permittee shall operate in a temporary transitional operating scenario which allows both the existing Line #1 and Line #2 to operate simultaneously for no more than 12 consecutive months.

Regulations

The following table contains the regulations applicable to this permit.

Regulations
Arkansas Air Pollution Control Code, Regulation 18, effective March 14, 2016
Regulations of the Arkansas Plan of Implementation for Air Pollution Control, Regulation 19, effective October 10, 2019
Regulations of the Arkansas Operating Air Permit Program, Regulation 26, effective March 14, 2016
40 C.F.R. Part 63, Subpart HHHH – National Emission Standards for Hazardous Air Pollutants for Wet-Formed Fiberglass Mat Production
40 C.F.R. Part 64, Compliance Assurance Monitoring

Emission Summary Before Proposed Facility (Line #2) is Fully Operational

The following table is a summary of emissions from the facility. This table, in itself, is not an enforceable condition of the permit.

EMISSION SUMMARY BEFORE LINE #2 IS FULLY OPERATIONAL, INCLUDING TRANSITION FROM LINE #1 TO LINE #2				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
Total Allowable Emissions Line #1 Only		PM	10.0	43.9
		PM_{10}	10.0	43.9

EMISSION SUMMARY BEFORE LINE #2 IS FULLY OPERATIONAL, INCLUDING TRANSITION FROM LINE #1 TO LINE #2				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
		$PM_{2.5}$	See Note*	
		SO_2	1.0	4.4
		VOC	31.0	136.0
		CO	50.0	219.0
		NO_X	10.0	43.8
HAPs		Acrylic Acid	7.10	31.10
		Formaldehyde	6.70	29.35
		Methanol	9.10	39.86
		Total Other HAPs	1.80	7.89
Air Contaminants ***		Ammonia	7.20	31.54
01	Oven Vapor Incinerator (Thermal Oxidizer)	PM	6.0	26.3
		PM_{10}	6.0	26.3
		SO_2	1.0	4.4
		VOC	3.0	13.2
		CO	50.0	219.0
		NO_x	10.0	43.8
		Acrylic Acid**	1.00	4.38
		Formaldehyde**	1.00	4.38
		Methanol**	1.00	4.38
		Total Other HAPs**	0.10	0.44
		Ammonia***	4.00	17.52
02	Waste Heat Boiler	Emissions are accounted for at SN-01		
03	Deltaformer Vacuums	PM	0.5	2.2
		PM_{10}	0.5	2.2
		VOC	3.0	13.2
		Acrylic Acid**	0.10	0.44
		Formaldehyde**	0.10	0.44
		Methanol**	0.10	0.44
		Total Other HAPs**	0.10	0.44
		Ammonia***	0.10	0.44
04	Saturator Vacuums	PM	0.5	2.2
		PM_{10}	0.5	2.2
		VOC	3.0	13.2
		Acrylic Acid**	0.50	2.19
		Formaldehyde**	0.50	2.19

EMISSION SUMMARY BEFORE LINE #2 IS FULLY OPERATIONAL, INCLUDING TRANSITION FROM LINE #1 TO LINE #2				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
		Methanol**	2.00	8.76
		Total Other HAPs**	0.10	0.44
		Ammonia***	0.10	0.44
05	Binder Mix & Run Tanks	VOC	2.0	8.8
		Acrylic Acid**	0.50	2.19
		Formaldehyde**	0.10	0.44
		Methanol**	1.00	4.38
		Total Other HAPs**	0.50	2.19
		Ammonia***	0.50	2.19
07	Mat Line Uncontrolled Emissions	PM	3.0	13.2
		PM_{10}	3.0	13.2
		VOC	20.0	87.6
		Acrylic Acid**	5.00	21.90
		Formaldehyde**	5.00	21.90
		Methanol**	5.00	21.90
		Total Other HAPs**	1.00	4.38
		Ammonia***	2.50	10.95

*$PM_{2.5}$ limits are source specific, if required. Not all sources have $PM_{2.5}$ limits.
**HAPs included in the VOC totals. Other HAPs are not included in any other totals unless specifically stated.
***Air Contaminants such as ammonia, acetone, and certain halogenated solvents are not VOCs or HAPs.

Emission Summary After Proposed Facility (Line #2) is Fully Operational

The following table is a summary of emissions from the facility. This table, in itself, is not an enforceable condition of the permit.

EMISSION SUMMARY AFTER LINE #2 IS FULLY OPERATIONAL AND LINE #1 IS NO LONGER IN OPERATION				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
Total Allowable Emissions Line #2 Only		PM	9.3	39.6
		PM_{10}	9.3	39.6
		$PM_{2.5}$	9.3	39.6

EMISSION SUMMARY AFTER LINE #2 IS FULLY OPERATIONAL AND LINE #1 IS NO LONGER IN OPERATION				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
		SO_2	0.6	0.6
		VOC	38.4	167.5
		CO	33.7	144.3
		NO_X	15.1	60.9
HAPs		Acrylic Acid	6.19	27.08
		Formaldehyde	4.77	20.81
		Methanol	10.79	47.22
		Styrene	1.31	5.69
		Triethylamine	1.31	5.69
		Total Other HAPs	0.46	1.95
Air Contaminants		Ammonia***	6.19	27.08
11	Regenerative Thermal Oxidizer	PM	7.6	33.3
		PM_{10}	7.6	33.3
		$PM_{2.5}$	7.6	33.3
		SO_2	0.1	0.4
		VOC	24.3	106.2
		CO	32.9	144.1
		NO_x	13.9	60.6
		Acrylic Acid**	4.79	20.99
		Formaldehyde**	3.99	17.49
		Methanol**	6.89	30.17
		Styrene**	1.00	4.37
		Triethylamine**	1.00	4.37
		Total Other HAPs	0.26	1.10
		Ammonia***	4.79	20.99
12	Former/Saturator and Fugitive Emissions and Wet End Building Exhaust	PM	0.5	2.1
		PM_{10}	0.5	2.1
		$PM_{2.5}$	0.5	2.1
		VOC	9.3	40.6
		Acrylic Acid**	0.47	2.05
		Formaldehyde**	0.39	1.71
		Methanol**	1.98	8.67
		Styrene**	0.10	0.43
		Triethylamine**	0.10	0.43
		Ammonia***	0.47	2.05
13	Binder Room	VOC	2.0	8.8

EMISSION SUMMARY AFTER LINE #2 IS FULLY OPERATIONAL AND LINE #1 IS NO LONGER IN OPERATION				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
		Acrylic Acid**	0.50	2.19
		Formaldehyde**	0.01	0.05
		Methanol**	1.00	4.38
		Styrene**	0.10	0.44
		Triethylamine**	0.10	0.44
		Ammonia***	0.50	2.19
14	Waste Trim Dust Collector	PM	1.0	4.1
		PM_{10}	1.0	4.1
		$PM_{2.5}$	1.0	4.1
		VOC	1.9	8.4
		Acrylic Acid**	0.42	1.84
		Formaldehyde**	0.35	1.53
		Methanol**	0.91	3.99
		Styrene**	0.10	0.44
		Triethylamine**	0.10	0.44
		Ammonia***	0.42	1.84
15	Diesel-Fired Emergency Fire Pump	PM	0.1	0.1
		PM_{10}	0.1	0.1
		$PM_{2.5}$	0.1	0.1
		SO_2	0.5	0.2
		VOC	0.1	0.1
		CO	0.8	0.2
		NO_x	1.2	0.3
		Formaldehyde	0.01	0.01
		Total Other HAPs	0.01	0.01

*$PM_{2.5}$ limits are source specific, if required. Not all sources have $PM_{2.5}$ limits.
**HAPs included in the VOC totals. Other HAPs are not included in any other totals unless specifically stated.
***Air Contaminants such as ammonia, acetone, and certain halogenated solvents are not VOCs or HAPs.

SECTION III: PERMIT HISTORY

Permit 747-A was not found in the Department records.

Permit 747-AR-1 was issued on October 22, 1991. This permit modified the existing permit to include facing and reinforcement mats. It also added a baghouse dust collection system to the mat line. Permitted emissions were 20.63 tpy PM/PM_{10}, 44.46 tpy VOC, 0.04 tpy SO_2, 1.53 tpy CO, 6.13 tpy NO_x, and 0.44 tpy ammonia.

Permit 747-AR-2 was issued on January 20, 1993. This modification added a cyclone to the mat area. This change resulted in an increase in PM/PM_{10} of 14.32 tpy.

Permit 747-AR-3 was issued on September 3, 1993. Emissions were recalculated based on AP-42 emission factors. This permit allowed emissions of 35 tpy PM/PM_{10}, 0.1 tpy SO_2, 44.4 tpy VOC, 4.9 tpy CO, 19.7 tpy NO_x, and 0.5 tpy NH_3.

Permit 747-AR-4 was issued on June 29, 1999. This permit increased production rates, emission rates, and allowed the removal of a source that was no longer being used. It also allowed the incorporation of a landfill gas burning operation.

Permit 747-AOP-R0 was issued on July 13, 2004. Emissions testing and anticipated future production rates indicated that it would be prudent to permit the facility as a Title V major source. This permit modification modified existing permit limits to reflect the results of emissions testing. Also this permit included the requirements of 40 CFR Part 63, Subpart HHHH, a MACT regulation for wet formed fiberglass mat production with an effective date of April 11, 2005. Finally, Owens Corning increased the allowable landfill gas usage limit to 1,216 MMSCF/yr to represent the maximum capacity and worst case emissions.

Permit 0747-AOP-R1 was issued on December 5, 2005. This permit modification modified existing permit limits to reflect the results of the most recent emissions testing performed at the facility. The permitted rates include a safety factor to insure future compliance. Permitted emission rates for SN-07 increased by 61.3 tpy of VOC, 8.8 tpy of acrylic acid, 2.1 tpy of ammonia, and 8.8 tpy of methanol. There were no changes being made in the operation of this facility.

Permit 0747-AOP-R2 was issued on May 22, 2008. This permit modification added a coated veil manufacturing operation. The coated veil manufacturing operation will consist of Coated Veil Curing & Drying Oven (SN-10A), Coated Veil Materials Storage and Mix Tanks (SN-10B), Coated Veil Printing & Drying Oven (SN-11), four (4) Aggregate Silos (SN-12 thru SN-15), two (2) Aggregate Hoppers (SN-16 & SN-17), and a Mat Trim Baghouse (SN-18). The permitted emissions increases include 7.4 tpy PM/PM_{10}, 0.2 tpy SO_2, 13.8 tpy VOC, 9.5 tpy CO, and 11.3 tpy NO_x.

Permit 0747-AOP-R3 was issued on October 26, 2009. This initial Title V renewal was to update information pertaining to emission limits based on recent stack test results and updates to the Insignificant Activities list.

Permit 0747-AOP-R4 was issued on November 25, 2014. With the second Title V Renewal, the facility requested to remove sources SN-10 through SN-18 as well as Specific Conditions #41 through #71 and Specific Condition #36. The Coated Veil production line permitted in 2008 was never installed. The permitted emission increases associated with this renewal were 1.7 tpy Ammonia. Permitted emission decreases were 7.4 tpy PM/PM_{10}, 0.2 tpy SO_2, 11.3 tpy NO_x, 9.5 tpy CO, and 3.0 tpy VOC.

Permit 0747-AOP-R5 was issued on January 27, 2020. With this Title V Renewal, the emission limits of several pollutants were conservatively increased as well as the discontinuation of testing based on the history of facility-wide testing results. SN-08 Trim Drop-Out Box was also reclassified as an insignificant activity. Permitted emission increases associated with this renewal are 4.7 tpy PM/PM_{10}, 13.14 tpy Acrylic Acid, 6.57 Formaldehyde, 10.95 tpy Methanol, and 3.49 tpy Total Other HAPs.

SECTION IV: SPECIFIC CONDITIONS

Line 1 (SN-01, SN-02, SN-03, SN-04, SN-05 and SN-07)

SN-01
Oven Vapor Incinerator

Source Description

Emissions from the drying/curing oven are controlled by a fume incinerator that vents at this point.

The uncontrolled emissions from SN-01 fulfill the applicability criteria of the Compliance Assurance Monitoring (CAM) Rule (40 Code of Federal Regulations (CFR) Part (§) 64). Accordingly, the (CAM) Plan for the facility is provided in Appendix B. Per §64.2(a), the aforementioned source is regulated under the CAM Rule because it meets the following criteria: (1) the unit is subject to emission limitations for VOC, (2) the source is equipped with a control device (i.e., baghouse, filter), and (3) the unit has potential pre-control emissions of VOC that exceed the applicable major source threshold (i.e., 100 tons per year). In accordance with §64.3, Owens Corning has developed a CAM Plan for this source. The Plan establishes the operating parameters that will be monitored in order to demonstrate compliance with the VOC emission limit at this source.

Specific Conditions

1. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Specific Conditions 5 and 6. [Regulation 19, §19.501 et seq., and 40 CFR Part 52, Subpart E]

SN	Description	Pollutant	lb/hr	ztpy
01	Oven Vapor Incinerator (Thermal Oxidizer)	PM_{10}	6.0	26.3
		SO_2	1.0	4.4
		VOC	3.0	13.2
		CO	50.0	219.0
		NO_x	10.0	43.8

2. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Specific Conditions 5 and 6. [Regulation 18, §18.801, and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

SN	Description	Pollutant	lb/hr	tpy
01	Oven Vapor	PM	6.0	26.3

SN	Description	Pollutant	lb/hr	tpy
	Incinerator (Thermal Oxidizer)	Acrylic Acid	1.00	4.38
		Formaldehyde	1.00	4.38
		Methanol	1.00	4.38
		Total Other HAPs	0.10	0.44
		Ammonia	4.00	17.52

3. Visible emissions may not exceed the limits specified in the following table of this permit as measured by EPA Reference Method 9

SN	Limit	Regulatory Citation
01	20%	Regulation 19, §19.503 and 40 CFR Part 52, Subpart E

4. The permittee shall conduct weekly observations of the opacity from sources SN-01 and keep a record of these observations. These observations shall be conducted by a person familiar with the permittee's visible emissions. If visible emissions which appear to be in excess of the permitted opacity are detected, the permittee shall immediately take action to identify the cause of the visible emissions, implement corrective action, and document that visible emissions did not appear to be in excess of the permitted opacity following the corrective action. If after corrective action is taken the emissions still appear to exceed the permitted opacity, a Method 9 reading shall be performed. The permittee shall maintain records of the cause of any visible emissions and the corrective action taken. The permittee must keep these records onsite and make them available to Department personnel upon request. [Regulation 19, §19.503 and 40 CFR Part 52, Subpart E]

5. The permittee shall only combust natural gas at this source. [Regulation 19, §19.705; Regulation 18, §18.1004; A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311; and 40 CFR Part 70.6]

6. The permittee shall comply with the CAM plan outlined in Appendix D of this permit for source SN-01, with the thermal oxidizer to maintain a minimum temperature of 1,385 °F (3-hour block average) in the incinerator while product is flowing to the curing oven. The Quality Improvement Plan (QIP) Threshold set by the CAM plan is 5% duration of the process operating time over a 6-month period. Compliance shall be demonstrated through compliance with Specific Condition # 7 and the CAM plan. [Regulation 19, §19.304 and §19.705; A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311; 40 CFR Part 64; and 40 CFR Part 70.6]

7. The permittee shall monitor the incinerator temperature continuously only while product is flowing to the curing oven and record the incinerator temperature on 15-minute and 3-hour block averages. [Regulation 19, §19.703, 40 CFR Part 52, Subpart E, 40 CFR Part 64 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

40 C.F.R. Part 63, Subpart HHHH Conditions

8. This source is subject to regulation under 40 CFR Part 63, *National Emission Standards for Hazardous Air Pollutants for Wet-Formed Fiberglass Mat Production* and must comply with the following provisions by April 11, 2005. These provisions include, but are not limited to, Specific Condition 9 - 23. [Regulation 19, §19.304 and 40 CFR Part 63, Subpart HHHH]

9. The facility shall limit the formaldehyde emissions from each drying and curing oven by either: [Reg.19.304 and 40 C.F.R. §63.2983(a)(1) and (2)]
    a. Limiting emissions of formaldehyde to 0.03 kilograms or less per megagram (0.05 pounds per ton) of fiberglass mat produced; or
    b. Reducing uncontrolled formaldehyde emissions by 96 percent or more.

10. The facility shall meet the following operating limits: [Reg.19.304 and 40 C.F.R. §63.2984(a) through (e)]
    a. The permittee shall maintain operating parameters within established limits or ranges specified in your operation, maintenance, and monitoring (OMM) plan described in §63.2987. If there is a deviation of any of the specified parameters from the limit or range specified in the OMM plan, you must address the deviation according to paragraph (b) of §63.2984. You must comply with the operating limits specified in paragraphs (a)(1) through (4) of §63.2984:
        i. You must operate the thermal oxidizer so that the average operating temperature in any 3-hour block period does not fall below the temperature established during your performance test and specified in your OMM plan, except during periods when using a non-HAP binder.
        ii. You must not use a resin with a free-formaldehyde content greater than that of the resin used during your performance test and specified in your OMM plan.
        iii. You must operate the wet-formed fiberglass mat production process so that the average urea formaldehyde resin solids application rate in any 3-hour block period does not exceed the average application rate achieved during your performance test and specified in your OMM plan.
    b. When during a period of normal operations you detect that an operating parameter deviates from the limit or range established in paragraph (a) of §63.2984, you must initiate corrective actions within 1 hour according to the provisions of your OMM plan. The corrective action actions must be completed in an expeditious manner as specified in the OMM plan.
    c. You must maintain and inspect control devices according to the procedures specified in the OMM plan.
    d. You must include the operating limits specified in paragraphs (a)(1) through (3) of §63.2984 and their allowable ranges or levels in your OMM plan. Your 40 CFR part 70 operating permit for the drying and curing oven must contain a requirement that you develop and operate according to an OMM plan at all times.

e. If you use a thermal oxidizer or other control device to achieve the emission limits in §63.2983, you must capture and convey the formaldehyde emissions from each drying and curing oven according to the procedures in chapters 3 and 5 of "Industrial Ventilation: A Manual of Recommended Practice" (23rd Edition) or the appropriate chapters of "Industrial Ventilation: A Manual of Recommended Practice for Design" (27th Edition)(both are incorporated by reference, see §63.14). In addition, you may use an alternate as approved by the Administrator.

11. The facility must be in compliance with 40 C.F.R. Subpart HHHH at startup. [Reg.19.304 and 40 C.F.R. §63.2985(d)]

12. The facility shall comply with the following standards: [Reg.19.304 and 40 C.F.R. §63.2986(a) through (g)]
    a. You must install, maintain, and operate a thermal oxidizer or other control device or implement a process modification that reduces formaldehyde emissions from each drying and curing oven to the emission limits specified in §63.2983.
    b. You must comply with the operating limits specified in §63.2984. The operating limits prescribe the requirements for demonstrating continuous compliance based on the OMM plan. You must begin complying with the operating limits on the date by which you must complete the initial performance test.
    c. You must conduct a performance test according to §63.2991, 63.2992, and 63.2993 to demonstrate compliance for each drying and curing oven subject to the emission limits in §63.2983, and to establish or modify the operating limits or ranges for process or control device parameters that will be monitored to demonstrate continuous compliance.
    d. You must install, calibrate, maintain, and operate devices that monitor the parameters specified in your OMM plan at the frequency specified in the plan. All continuous parameter monitoring systems must be installed and operating no later than the applicable compliance date specified in §63.2985.
    e. You must prepare and follow a written OMM plan as specified in §63.2987.
    f. You must comply with the monitoring, recordkeeping, notification, and reporting requirements of this subpart as required by §63.2996 through 63.3000.
    g. You must comply with the requirements in paragraphs (g)(1) through (3) of §63.2986.
        i. You must be in compliance with the emission limits in §63.2983 and the operating limits in §63.2984 at all times, including periods of startup, shutdown, or malfunction.
        ii. You must always operate and maintain any affected source, including air pollution control and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions.
        iii. A startup, shutdown, and malfunction plan is not required for such affected sources after August 27, 2019.

13. The operation, maintenance, and monitoring (OMM) plan shall include the following: [Reg.19.304 and 40 C.F.R. §63.2987(a) through (d)]

a. You must prescribe the monitoring that will be performed to ensure compliance with these emission limitations. Minimum monitoring requirements are listed in table 1 of this subpart. Your plan must specify the items listed in paragraphs (a)(1) through (3) of §63.2987:
    i. Each process and control device to be monitored, the type of monitoring device that will be used, and the operating parameters that will be monitored.
    ii. A monitoring schedule that specifies the frequency that the parameter values will be determined and recorded.
    iii. The operating limits or ranges for each parameter that represent continuous compliance with the emission limits in §63.2983. Operating limits and ranges must be based on values of the monitored parameters recorded during performance tests.

b. You must establish routine and long-term maintenance and inspection schedules for each control device. You must incorporate in the schedules the control device manufacturer's recommendations for maintenance and inspections or equivalent procedures. If you use a thermal oxidizer, the maintenance schedule must include procedures for annual or more frequent inspection of the thermal oxidizer to ensure that the structural and design integrity of the combustion chamber is maintained. At a minimum, you must meet the requirements of paragraphs (b)(1) through (10) of §63.2987:
    i. Inspect all burners, pilot assemblies, and pilot sensing devices for proper operation. Clean pilot sensor if necessary.
    ii. Ensure proper adjustment of combustion air and adjust if necessary.
    iii. Inspect, when possible, all internal structures (such as baffles) to ensure structural integrity per the design specifications.
    iv. Inspect dampers, fans, and blowers for proper operation.
    v. Inspect motors for proper operation.
    vi. Inspect, when possible, combustion chamber refractory lining. Clean and repair or replace lining if necessary.
    vii. Inspect the thermal oxidizer shell for proper sealing, corrosion, and hot spots.
    viii. For the burn cycle that follows the inspection, document that the thermal oxidizer is operating properly and make any necessary adjustments.
    ix. Generally observe whether the equipment is maintained in good operating condition.
    x. Complete all necessary repairs as soon as practicable.

c. You must establish procedures for responding to operating parameter deviations. At a minimum, the procedures must include the information in paragraphs (c)(1) through (3) of §63.2987.
    i. Procedures for determining the cause of the operating parameter deviation.
    ii. Actions for correcting the deviation and returning the operating parameters to the allowable ranges or limits.
    iii. Procedures for recording the date and time that the deviation began and ended, and the times corrective actions were initiated and completed.

d. Your plan must specify the recordkeeping procedures to document compliance with the emissions and operating limits. Table 1 of this subpart establishes the minimum recordkeeping requirements.

14. The facility must conduct a performance test for each drying and curing oven subject to this subpart according to the provisions in paragraphs (a) through (c) of §63.2991: [Reg.19.304 and 40 C.F.R. §63.2991(a) through (c)]
    a. Initially. You must conduct an initial performance test no later than 180 days after the applicable compliance date specified in §63.2985 (April 11, 2005). The initial performance test is used to demonstrate initial compliance and establish operating parameter limits and ranges to be used to demonstrate continuous compliance with the emission standards.
    b. Every 5 years. You must conduct a performance test every 5 years as part of renewing your 40 CFR part 70 operating permit.
    c. To change your OMM plan. You must conduct a performance test according to the requirements specified in §63.2992 to change the limit or range for any operating limit specified in your OMM plan established during a previous compliance test.

15. The facility shall conduct performance tests according to the following provisions: [Reg.19.304 and 40 C.F.R. §63.2992(a) through (f)]
    a. You must verify the performance of monitoring equipment as specified in §63.2994 before performing the test.
    b. You must conduct the performance test according to the procedures in §63.7(a) through (d), (e)(2) through (4), and (f) through (h).
    c. You must conduct the performance test under the conditions specified in paragraphs (c)(1) and (2) of §63.2992.
        i. The resin must have the highest specified free-formaldehyde content that will be used.
        ii. You must operate at the maximum feasible urea-formaldehyde resin solids application rate (pounds urea-formaldehyde resin solids applied per hour) that will be used.
    d. During the performance test, you must monitor and record the operating parameters that you will use to demonstrate continuous compliance after the test. These parameters are listed in table 1 of this subpart.
    e. You must conduct performance tests under conditions that are representative of the performance of the affected source. Representative conditions exclude periods of startup and shutdown. You may not conduct performance tests during periods of malfunction. You must record the process information that is necessary to document operating conditions during the test and record an explanation to support that such conditions represent normal operation. Upon request, you must make available to the Administrator such records as may be necessary to determine the conditions of performance tests.
    f. You must conduct three separate test runs for each performance test as specified in §63.7(e)(3), and each test run must last at least 1 hour.

16. The facility shall use the following test methods when conducting performance tests: [Reg.19.304 and 40 C.F.R. §63.2993(a) through (g)]
    a. Use EPA Method 1 (40 CFR part 60, appendix A) for selecting the sampling port location and the number of sampling ports.
    b. Use EPA Method 2 (40 CFR part 60, appendix A) for measuring the volumetric flow rate.
    c. Use EPA Method 3 or 3A (40 CFR part 60, appendix A-2) for measuring oxygen and carbon dioxide concentrations needed to correct formaldehyde concentration measurements to a standard basis.
    d. Use EPA Method 4 (40 CFR part 60, appendix A-3) for measuring the moisture content of stack gas.
    e. Use EPA Method 316, 318 or 320 (40 CFR part 63, appendix A) for measuring the concentration of formaldehyde.
    f. Use the method contained in appendix A of this subpart or the resin purchase specification and the vendor specification sheet for each resin lot for determining the free-formaldehyde content in the urea-formaldehyde resin.
    g. Use the method in appendix B of this subpart for determining product loss-on-ignition.

17. The facility shall verify the performance of monitoring equipment according to the following provisions: [Reg.19.304 and 40 C.F.R. §63.2994(a) and (b)]
    a. Before conducting the performance test, you must take the steps listed in paragraphs (a)(1) through (3) of §63.2994:
        i. Install and calibrate all process equipment, control devices, and monitoring equipment.
        ii. Conduct a performance evaluation of the continuous monitoring system (CMS) according to § 63.8(e) which specifies the general requirements and requirements for notifications, the site-specific performance evaluation plan, conduct of the performance evaluation, and reporting of performance evaluation results.
        iii. Conduct a performance evaluation of the CPMS according to §63.8(e) which specifies the general requirements and requirements for notifications, the site-specific performance evaluation plan, conduct of the performance evaluation, and reporting of performance evaluation results.
    b. If you use a thermal oxidizer, the temperature monitoring device must meet the performance and equipment specifications listed in paragraphs (b)(1) through (3) of §63.2994:
        i. The temperature monitoring device must be installed either at the exit of the combustion zone of each thermal oxidizer, or at the location specified by the manufacturer. The temperature monitoring device must also be installed in a location before any heat recovery or heat exchange equipment, and it must remain in the same location for both the performance test and the continuous monitoring of temperature.

ii. The recorder response range must include zero and 1.5 times the average temperature required in §63.2984(a)(1).
iii. The measurement method or reference method for calibration must be a National Institute of Standards and Technology calibrated reference thermocouple-potentiometer system or an alternate reference subject to the approval of the Administrator.

18. The facility must monitor the parameters listed in table 1 of 40 C.F.R. Part 63 Subpart HHHH and any other parameters specified in your OMM plan. The parameters must be monitored, at a minimum, at the corresponding frequencies listed in the table. During periods when using a non-HAP binder, you are not required to monitor the parameters in Table 1 to Subpart HHHH [Reg.19.304 and 40 C.F.R. §63.2996(a) and (b)]

19. The facility must meet the following monitoring device requirements when using a thermal oxidizer to control formaldehyde emissions: [Reg.19.304 and 40 C.F.R. §63.2997(a) and (b)]
    a. If you control formaldehyde emissions using a thermal oxidizer, you must meet the requirements in paragraphs a(1) and (2) of this section:
        i. Install, calibrate, maintain, and operate a device to monitor and record continuously the thermal oxidizer temperature at the exit of the combustion zone before any substantial heat exchange occurs or at the location consistent with the manufacturer's recommendations.
        ii. Continuously monitor the thermal oxidizer temperature and determine and record the average temperature in 15-minute and 3-hour block averages. You may determine the average temperature more frequently than every 15 minutes and every 3 hours, but not less frequently
    b. If you use the process modifications or a control device other than a thermal oxidizer to control formaldehyde emissions, you must install, calibrate, maintain, and operate devices to monitor the parameters established in your OMM plan at the frequency established in the plan.

20. The facility must maintain records according to the procedures of §63.10 and must maintain the following records: [Reg.19.304 and 40 C.F.R. §63.2998(a) through (i), not (e)]
    a. All records required by §63.10. Table 2 of this subpart presents the applicable requirements of the general provisions.
    b. The OMM plan.
    c. Records of values of monitored parameters listed in table 1 of this subpart to show continuous compliance with each operating limit specified in table 1 of this subpart. If you do not monitor parameters in Table 1 to this subpart during periods when using non-HAP binder, you must record the dates and times that production of mat using non-HAP binder began and ended.
    d. Records of maintenance and inspections performed on the control devices.
    f. Records specified in §63.6(e)(3)(iii) through (v) are not required to be kept after August 27, 2019 for existing or new drying and curing ovens.

g. After August 27, 2019 for all other affected sources, in the event that an affected source fails to meet an applicable standard, including deviations from an emission limit in §63.2983 or an operating limit in §63.2984, you must record the number of failures and, for each failure, you must:
   i. Record the date, time, and duration of the failure;
   ii. Describe the cause of the failure;
   iii. Record and retain a list of the affected sources or equipment, an estimate of the quantity of each regulated pollutant emitted over any emission limit, and a description of the method used to estimate the emissions; and
   iv. Record actions taken to minimize emissions in accordance with §63.2986(g)(2) and any corrective actions taken to return the affected unit to its normal or usual manner of operation and/or to return the operating parameter to the limit or to within the range specified in the OMM plan, and the dates and times at which corrective actions were initiated and completed.

h. If you operate your process or control device under alternative operating condition and have established operating limits for each condition as specified in §63.2989(c), then you must keep records of the date and time you changed operations from one condition to another, the condition under which you are operating, and the applicable operating limits for that condition.

i. Records showing how the maximum residence time was derived.

21. The facility must maintain each record required by this subpart for 5 years. You must maintain the most recent 2 years of records at the facility. The remaining 3 years of records may be retained offsite. The records must be readily available and in a form so they can be easily inspected and reviewed. You can keep the records on paper or an alternative media, such as microfilm, computer, computer disks, magnetic tape, or on microfiche. You may maintain any records that you submitted electronically via the EPA's Compliance and Emissions Data Reporting Interface (CEDRI) in electronic format. This ability to maintain copies does not affect the requirement for facilities to make records, data, and reports available upon request to a delegated air agency or the EPA as part of an onsite compliance evaluation. [Reg.19.304 and 40 C.F.R. §63.2999(a) through (c)]

22. The facility must submit the following notifications and reports: [Reg.19.304 and 40 C.F.R. §63.3000(a) through (g)]
   a. You must submit all notifications and reports required by the applicable general provisions and §63.3000. Table 2 of this subpart presents the applicable requirements of the general provisions.
   b. Notification of compliance status. You must submit the notification of compliance status, including the performance test results, the operating limits or ranges as determined during the performance test, and other information specified in §63.9(h), before the close of business on the 60th calendar day after you complete the performance test according to §63.10(d)(2).

c. Semiannual compliance reports. You must submit semiannual compliance reports according to the requirements of paragraphs (c)(1) through (6) not (5) of §63.3000.
    i. Dates for submitting reports. Unless the Administrator has agreed to a different schedule for submitting reports under §63.10(a), you must deliver or postmark each semiannual compliance report no later than 30 days following the end of each semiannual reporting period. The first semiannual reporting period begins on the compliance date for your affected source and ends on June 30 or December 31, whichever date immediately follows your compliance date. Each subsequent semiannual reporting period for which you must submit a semiannual compliance report begins on July 1 or January 1 and ends 6 calendar months later. After February 28, 2019, you are not required to submit quarterly compliance reports.
    ii. Inclusion with Title V report. For each affected source that is subject to permitting regulations pursuant to 40 CFR part 70 or 71, and for which the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 71.6 (a)(3)(iii)(A), you may submit the first and subsequent compliance reports according to the dates the permitting authority has established instead of according to the dates in paragraph (c)(1) of this section.
    iii. Contents of reports. The semiannual compliance report must contain the information in paragraphs (c)(3)(i) through (vi) of §63.3000:
        1. Company name and address.
        2. Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.
        3. Date of report and beginning and ending dates of the reporting period.
        4. A summary of the total duration of continuous parameter monitoring system downtime during the semiannual reporting period and the total duration of continuous parameter monitoring system downtime as a percent of the total source operating time during that semiannual reporting period.
        5. The date of the latest continuous parameter monitoring system certification or audit.
        6. A description of any changes in the wet-formed fiberglass mat manufacturing process, continuous parameter monitoring system, or add-on control device since the last semiannual reporting period.
    iv. No deviations. If there were no deviations from the emission limit in §63.2983 or the operating limits in §63.2984, the semiannual compliance report must include a statement to that effect. If there were no periods during which the continuous parameter monitoring systems were out-of-control as specified in §63.8(c)(7), the semiannual compliance report must include a statement to that effect.

v. Deviations. For affected sources that commence construction or reconstruction after April 6, 2018, after February 28, 2019, and after August 27, 2019 for all other affected sources, if there was an instance where an affected source failed to meet an applicable standard, including a deviation from the emission limit in §63.2983 or an operating limit in §63.2984, the semiannual compliance report must record the number of failures and contain the information in paragraphs (c)(6)(i) through (ix) of this section:

1. The date, time, and duration of each failure.
2. The date and time that each continuous parameter monitoring system was inoperative, except for zero (low-level) and high-level checks.
3. The date, time, and duration that each continuous parameter monitoring system was out-of-control, including the information in §63.8(c)(8).
4. A list of the affected sources or equipment, an estimate of the quantity of each regulated pollutant emitted over any emission limit, and a description of the method used to estimate the emissions.
5. The date and time that corrective actions were taken, a description of the cause of the failure (including unknown cause, if applicable), and a description of the corrective actions taken.
6. A summary of the total duration of each failure during the semiannual reporting period and the total duration as a percent of the total source operating time during that semiannual reporting period.
7. A breakdown of the total duration of the failures during the semiannual reporting period into those that were due to control equipment problems, process problems, other known causes, and other unknown causes.
8. A brief description of the associated process units.
9. A brief description of the continuous parameter monitoring system.

d. No startup, shutdown, or malfunction plan is required for any affected source that commences construction or reconstruction after April 6, 2018.

e. Performance test reports. You must submit results of each performance test (as defined in §63.2) required by this subpart no later than 60 days after completing the test as specified in §63.10(d)(2). You must include the values measured during the performance test for the parameters listed in Table 1 of this subpart and the operating limits or ranges that you will include in your OMM plan. For the thermal oxidizer temperature, you must include 15-minute averages and the average for the three 1-hour test runs. For affected sources that commence construction or reconstruction after April6, 2018, beginning February 28, 2019, and beginning no later than August 27, 2019 for all other affected sources, you must submit the results following the procedures specified in paragraphs (e)(1) through (3) of this section.

i. For data collected using test methods supported by the EPA's Electronic Reporting Tool (ERT) as listed on the EPA's ERT website (*https://www.epa.gov/electronic-reporting-air-emissions/electronic-reporting-tool-ert*) at the time of the test, you must submit the results of the performance test to the EPA via CEDRI (CEDRI can be accessed through the EPA's Central Data Exchange (CDX) (*https://cdx.epa.gov/*). You must submit performance test data in a file format generated through the use of the EPA's ERT or an alternate electronic file format consistent with the extensible markup language (XML) schema listed on the EPA's ERT website.

ii. For data collected using test methods that are not supported by the EPA's ERT as listed on the EPA's ERT website at the time of the test, you must submit the results of the performance test to the Administrator at the appropriate address listed in §63.13, unless the Administrator agrees to or specifies an alternate reporting method.

iii. If you claim that some of the performance test information you are submitting under paragraph (e)(1) is confidential business information (CBI), you must submit a complete file generated through the use of the EPA's ERT or an alternate electronic file consistent with the XML schema listed on the EPA's ERT website, including information claimed to be CBI, on a compact disk, flash drive or other commonly used electronic storage medium to the EPA. You must clearly mark the electronic medium as CBI and mail to U.S.EPA/OAQPS/CORE CBI omitted to the EPA via the EPA's CDX as described in paragraph (e)(1) of this section.

f. Claims of EPA system outage. If you are required to electronically submit a report through the CEDRI in the EPA's CDX, you may assert a claim of EPA outage for failure to timely comply with the reporting requirement. To assert a claim of EPA system outage, you must meet the requirements outlined in paragraphs (f)(1) through (7) of this section.

i. You must have been or will be precluded from accessing CEDRI and submitting a required test report within the time prescribed due to an outage of either the EPA's CEDRI or CDX Systems.

ii. The outage must have occurred within the period of time beginning five business days prior to the date that the submission is due.

iii. The outage may be planned or unplanned.

iv. You must submit notification to the Administrator in writing as soon as possible following the date you first knew, or through due diligence should have known, that the event may cause or has caused a delay in reporting.

v. You must provide to the Administrator a written description identifying:

1. The date(s) and time(s) when CDX or CEDRI was accessed and the system was unavailable;
2. A rationale for attributing the delay in reporting beyond the regulatory deadline to EPA system outage;

3. Measures take or to be taken to minimize the delay in reporting; and
4. The date by which you propose to report, or if you have already met the reporting requirement at the time of the notification, the date you reported.

vi. The decision to accept the claim of EPA system outage and allow an extension to the reporting deadline is solely within the discretion of the Administrator.

vii. In any circumstance, the report must be submitted electronically as soon as possible after the outage is resolved.

g. Claims of force majeure. If you are required to electronically submit a report through CEDRI in the EPA's CDX, you may assert a claim of force majeure for failure to timely comply with the reporting requirement. To assert a claim of force majeure, you must meet the requirements outlined in paragraphs (g)(1) through (5) of this section.

i. You may submit a claim if a force majeure event is about to occur, occurs, or has occurred or there are lingering effects from such an event within the period of time beginning five business days prior to the date the submission is due. For the purposes of this section, a force majeure event is defined as an event that will be or has been caused by circumstances beyond the control of the affected facility, its contractors, or any entity controlled by the affected facility that prevents you from complying with the requirements to submit a report electronically within the time period prescribed. Examples of such events are acts of nature (e.g., hurricanes, earthquakes, or floods), acts of war or terrorism, or equipment failure or safety hazard beyond the control of the affected facility (e.g., large scale power outage).

ii. You must submit notification to the Administrator in writing as soon as possible following the date you first knew, or through due diligence should have known, that the event may cause or has caused a delay in reporting.

iii. You must provide to the Administrator:

1. A written description of the force majeure event;
2. A rationale for attributing the delay in reporting beyond the regulatory deadline to the force majeure event;
3. Measures taken or to be taken to minimize the delay in reporting; and
4. The date by which you propose to report, or if you have already met the reporting requirement at the time of the notification, the date you reported.

iv. The decision to accept the claim of force majeure and allow an extension to the reporting deadline is solely within the discretion of the Administrator.

v. In any circumstance, the reporting must occur as soon as possible after the force majeure event occurs.

23. The facility must comply with the requirements of the general provisions of 40 C.F.R. Part 63, subpart A, as specified in table 2 of 40 C.F.R. Part 63 Subpart HHHH. [Reg.19.304 and 40 C.F.R. §63.3001]

SN-03
Deltaformer Vacuums

Source Description

Vacuum is used to remove excess liquid from the thick stock. Air from the vacuum lines is routed through a series of moisture separators to remove entrained water prior to being emitted to the atmosphere at this source.

Specific Conditions

24. The permittee shall not exceed the emission rates set forth in the following table. Emission rates are based on stack testing and are considered to represent worst case. [Regulation 19 §19.501 et seq. and 40 CFR Part 52, Subpart E]

SN	Description	Pollutant	lb/hr	tpy
03	Deltaformer Vacuums	PM_{10}	0.5	2.2
		VOC	3.0	13.2

25. The permittee shall not exceed the emission rates set forth in the following table. Emission rates are based on stack testing and are considered to represent worst case. [Regulation 18 §18.801 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

SN	Description	Pollutant	lb/hr	tpy
03	Deltaformer Vacuums	PM	0.5	2.2
		Acrylic Acid	0.10	0.44
		Formaldehyde	0.10	0.44
		Methanol	0.10	0.44
		Total Other HAPs	0.10	0.44
		Ammonia	0.10	0.44

26. Visible emissions may not exceed the limits specified in the following table of this permit as measured by EPA Reference Method 9.

SN	Limit	Regulatory Citation
03	5%	Regulation 18, §18.501 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311

27. The permittee shall conduct weekly observations of the opacity from source SN-03 and keep a record of these observations. These observations shall be conducted by a person familiar with the permittee's visible emissions. If visible emissions which appear to be in excess of the permitted opacity are detected, the permittee shall immediately take action to identify the cause of the visible emissions, implement corrective action, and document that visible emissions did not appear to be in excess of the permitted opacity following

the corrective action. If after corrective action is taken the emissions still appear to exceed the permitted opacity, a Method 9 reading shall be performed. The permittee shall maintain records of the cause of any visible emissions and the corrective action taken. The permittee must keep these records onsite and make them available to Department personnel upon request. [Regulation 18, §18.501 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

SN-04
Saturator Vacuums

Source Description

Vacuum is used to remove excess liquid from the mat. Air from the vacuum lines is routed through a series of moisture separators to removed entrained water prior to being emitted to the atmosphere at this source.

Specific Conditions

28. The permittee shall not exceed the emission rates set forth in the following table. Emission rates are based on stack testing and are considered to represent worst case. [Regulation 19, §19.501 et seq. and 40 CFR Part 52, Subpart E]

SN	Description	Pollutant	lb/hr	tpy
04	Saturator Vacuums	PM_{10}	0.5	2.2
		VOC	3.0	13.2

29. The permittee shall not exceed the emission rates set forth in the following table. Emission rates are based on stack testing and are considered to represent worst case. [Regulation 18, §18.801, and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

SN	Description	Pollutant	lb/hr	tpy
04	Saturator Vacuums	PM	0.5	2.2
		Acrylic Acid	0.50	2.19
		Formaldehyde	0.50	2.19
		Methanol	2.00	8.76
		Total Other HAPs	0.10	0.44
		Ammonia	0.10	0.44

30. Visible emissions may not exceed the limits specified in the following table of this permit as measured by EPA Reference Method 9.

SN	Limit	Regulatory Citation
04	5%	Regulation 18, §18.501 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311

31. The permittee shall conduct weekly observations of the opacity from source SN-04 and keep a record of these observations. These observations shall be conducted by a person familiar with the permittee's visible emissions. If visible emissions which appear to be in excess of the permitted opacity are detected, the permittee shall immediately take action

to identify the cause of the visible emissions, implement corrective action, and document that visible emissions did not appear to be in excess of the permitted opacity following the corrective action. If after corrective action is taken the emissions still appear to exceed the permitted opacity, a Method 9 reading shall be performed. The permittee shall maintain records of the cause of any visible emissions and the corrective action taken. The permittee must keep these records onsite and make them available to Department personnel upon request. [Regulation, §18.501 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

SN-05
Binder Mix & Run Tanks

Source Description

Emissions resulting from binder moving throughout the process are emitted at this source.

Specific Conditions

32. The permittee shall not exceed the emission rates set forth in the following table. Emission rates are based on stack testing and are considered to represent worst case. [Regulation 19, §19.501 et seq. and 40 CFR Part 52, Subpart E]

SN	Description	Pollutant	lb/hr	tpy
05	Binder Mix & Run Tanks	VOC	2.0	8.8

33. The permittee shall not exceed the emission rates set forth in the following table. Emission rates are based on stack testing and are considered to represent worst case. [Regulation 18, §18.801, and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

SN	Description	Pollutant	lb/hr	tpy
05	Binder Mix & Run Tanks	Acrylic Acid	0.50	2.19
		Formaldehyde	0.10	0.44
		Methanol	1.00	4.38
		Total Other HAPs	0.50	2.19
		Ammonia	0.50	2.19

SN-07

Mat Line Uncontrolled Emissions

Source Description

Uncontrolled emissions from the mat line are exhausted through roof vents.

Specific Conditions

34. The permittee shall not exceed the emission rates set forth in the following table. Emission rates are based on stack testing and are considered to represent worst case. [Regulation 19, §19.501 et seq. and 40 CFR Part 52, Subpart E]

SN	Description	Pollutant	lb/hr	tpy
07	Mat Line Uncontrolled Emissions	PM_{10}	3.0	13.2
		VOC	20.0	87.6

35. The permittee shall not exceed the emission rates set forth in the following table. Emission rates are based on stack testing and are considered to represent worst case. [Regulation 18, §18.801, and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

SN	Description	Pollutant	lb/hr	tpy
07	Mat Line Uncontrolled Emissions	PM	3.0	13.2
		Acrylic Acid	5.00	21.90
		Formaldehyde	5.00	21.90
		Methanol	5.00	21.90
		Total Other HAPs	1.00	4.38
		Ammonia	2.50	10.95

Line 2 (SN-11 through SN-15)

SN-11
Regenerative Thermal Oxidizer

Source Description

Emissions from the curing/drying process include PM, PM_{10}, $PM_{2.5}$, and VOC, as well as certain HAPs present in the binders and pollutants from the combustion of natural gas. The regenerative thermal oxidizer (RTO) controls the emissions from the curing/drying oven.

Specific Conditions

36. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by complying with Specific Conditions 40 and 41. [Reg.19.501 *et seq.* and 40 C.F.R. § 52 Subpart E]

SN	Description	Pollutant	lb/hr	tpy
11	Regenerative Thermal Oxidizer	PM_{10}	7.6	33.3
		$PM_{2.5}$	7.6	33.3
		SO_2	0.1	0.4
		VOC	24.3	106.2
		CO	32.9	144.1
		NO_x	13.9	60.6

37. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by complying with Specific Conditions 40 and 41 [Reg.18.801 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]

SN	Description	Pollutant	lb/hr	tpy
11	Regenerative Thermal Oxidizer	PM	7.6	13.4
		Acrylic Acid	4.79	20.99
		Formaldehyde	3.99	17.49
		Methanol	6.89	30.17

SN	Description	Pollutant	lb/hr	tpy
		Styrene	1.00	4.37
		Triethylamine	1.00	4.37
		Total Other HAPs	0.25	1.10
		Ammonia	4.79	20.99

38. Visible emissions may not exceed the limits specified in the following table of this permit as measured by EPA Reference Method 9.

SN	Limit	Regulatory Citation
11	5%	Regulation 19, §19.503 and 40 CFR Part 52, Subpart E

39. The permittee shall conduct weekly observations of the opacity from sources SN-11 and keep a record of these observations. These observations shall be conducted by a person familiar with the permittee's visible emissions. If visible emissions which appear to be in excess of the permitted opacity are detected, the permittee shall immediately take action to identify the cause of the visible emissions, implement corrective action, and document that visible emissions did not appear to be in excess of the permitted opacity following the corrective action. If after corrective action is taken the emissions still appear to exceed the permitted opacity, a Method 9 reading shall be performed. The permittee shall maintain records of the cause of any visible emissions and the corrective action taken. The permittee must keep these records onsite and make them available to Department personnel upon request. [Regulation 19, §19.503 and 40 CFR Part 52, Subpart E]

40. The permittee shall only combust natural gas at this source. [Regulation 19, §19.705; Regulation 18, §18.1004; A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311; and 40 CFR Part 70.6]

41. The permittee shall comply with the CAM plan outlined in Appendix B of this permit for source SN-11, with the thermal oxidizer to maintain a minimum temperature of 1,400 °F (3-hour block average) in the thermal oxidizer while product is flowing to the curing oven. The Quality Improvement Plan (QIP) Threshold set by the CAM plan is 5% duration of the process operating time over a 6-month period. Compliance shall be demonstrated through compliance with Specific Condition # 42 and the CAM plan. [Regulation 19, §19.304 and §19.705; A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311; 40 CFR Part 64; and 40 CFR Part 70.6]

42. The permittee shall monitor the thermal oxidizer temperature continuously only while product is flowing to the curing oven and record the thermal oxidizer temperature on 15-

minute and 3-hour block averages. [Regulation 19, §19.703, 40 CFR Part 52, Subpart E, 40 CFR Part 64 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

40 C.F.R. Part 63, Subpart HHHH Conditions

43. This source is subject to regulation under 40 CFR Part 63, *National Emission Standards for Hazardous Air Pollutants for Wet-Formed Fiberglass Mat Production* and must comply with the following provisions by April 11, 2005. These provisions include, but are not limited to, Specific Condition 44 - 58. [Regulation 19, §19.304 and 40 CFR Part 63, Subpart HHHH]

44. The facility shall limit the formaldehyde emissions from each drying and curing oven by either: [Reg.19.304 and 40 C.F.R. §63.2983(a)(1) and (2)]
    c. Limiting emissions of formaldehyde to 0.03 kilograms or less per megagram (0.05 pounds per ton) of fiberglass mat produced; or
    d. Reducing uncontrolled formaldehyde emissions by 96 percent or more.

45. The facility shall meet the following operating limits: [Reg.19.304 and 40 C.F.R. §63.2984(a) through (e)]
    a. The permittee shall maintain operating parameters within established limits or ranges specified in your operation, maintenance, and monitoring (OMM) plan described in §63.2987. If there is a deviation of any of the specified parameters from the limit or range specified in the OMM plan, you must address the deviation according to paragraph (b) of §63.2984. You must comply with the operating limits specified in paragraphs (a)(1) through (4) of §63.2984:
        iv. You must operate the thermal oxidizer so that the average operating temperature in any 3-hour block period does not fall below the temperature established during your performance test and specified in your OMM plan, except during periods when using a non-HAP binder.
        v. You must not use a resin with a free-formaldehyde content greater than that of the resin used during your performance test and specified in your OMM plan.
        vi. You must operate the wet-formed fiberglass mat production process so that the average urea formaldehyde resin solids application rate in any 3-hour block period does not exceed the average application rate achieved during your performance test and specified in your OMM plan.
    b. When during a period of normal operations you detect that an operating parameter deviates from the limit or range established in paragraph (a) of §63.2984, you must initiate corrective actions within 1 hour according to the provisions of your OMM plan. The corrective action actions must be completed in an expeditious manner as specified in the OMM plan.
    c. You must maintain and inspect control devices according to the procedures specified in the OMM plan.
    d. You must include the operating limits specified in paragraphs (a)(1) through (3) of §63.2984 and their allowable ranges or levels in your OMM plan. Your 40

CFR part 70 operating permit for the drying and curing oven must contain a requirement that you develop and operate according to an OMM plan at all times.

e. If you use a thermal oxidizer or other control device to achieve the emission limits in §63.2983, you must capture and convey the formaldehyde emissions from each drying and curing oven according to the procedures in chapters 3 and 5 of "Industrial Ventilation: A Manual of Recommended Practice" (23rd Edition) or the appropriate chapters of “Industrial Ventilation: A Manual of Recommended Practice for Design” (27th Edition)(both are incorporated by reference, see §63.14). In addition, you may use an alternate as approved by the Administrator.

46. The facility must be in compliance with 40 C.F.R. Subpart HHHH at startup. [Reg.19.304 and 40 C.F.R. §63.2985(d)]

47. The facility shall comply with the following standards: [Reg.19.304 and 40 C.F.R. §63.2986(a) through (g)]

h. You must install, maintain, and operate a thermal oxidizer or other control device or implement a process modification that reduces formaldehyde emissions from each drying and curing oven to the emission limits specified in §63.2983.

i. You must comply with the operating limits specified in §63.2984. The operating limits prescribe the requirements for demonstrating continuous compliance based on the OMM plan. You must begin complying with the operating limits on the date by which you must complete the initial performance test.

j. You must conduct a performance test according to §63.2991, 63.2992, and 63.2993 to demonstrate compliance for each drying and curing oven subject to the emission limits in §63.2983, and to establish or modify the operating limits or ranges for process or control device parameters that will be monitored to demonstrate continuous compliance.

k. You must install, calibrate, maintain, and operate devices that monitor the parameters specified in your OMM plan at the frequency specified in the plan. All continuous parameter monitoring systems must be installed and operating no later than the applicable compliance date specified in §63.2985.

l. You must prepare and follow a written OMM plan as specified in §63.2987.

m. You must comply with the monitoring, recordkeeping, notification, and reporting requirements of this subpart as required by §63.2996 through 63.3000.

n. You must comply with the requirements in paragraphs (g)(1) through (3) of §63.2986.

i. You must be in compliance with the emission limits in §63.2983 and the operating limits in §63.2984 at all times, including periods of startup, shutdown, or malfunction.

ii. You must always operate and maintain any affected source, including air pollution control and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions.

iii. No startup, shutdown, or malfunction plan (SSMP) is required for any affected source that commences construction or reconstruction after April 6, 2018.

48. The operation, maintenance, and monitoring (OMM) plan shall include the following: [Reg.19.304 and 40 C.F.R. §63.2987(a) through (d)]

e. You must prescribe the monitoring that will be performed to ensure compliance with these emission limitations. Minimum monitoring requirements are listed in table 1 of this subpart. Your plan must specify the items listed in paragraphs (a)(1) through (3) of §63.2987:

iv. Each process and control device to be monitored, the type of monitoring device that will be used, and the operating parameters that will be monitored.

v. A monitoring schedule that specifies the frequency that the parameter values will be determined and recorded.

vi. The operating limits or ranges for each parameter that represent continuous compliance with the emission limits in §63.2983. Operating limits and ranges must be based on values of the monitored parameters recorded during performance tests.

f. You must establish routine and long-term maintenance and inspection schedules for each control device. You must incorporate in the schedules the control device manufacturer's recommendations for maintenance and inspections or equivalent procedures. If you use a thermal oxidizer, the maintenance schedule must include procedures for annual or more frequent inspection of the thermal oxidizer to ensure that the structural and design integrity of the combustion chamber is maintained. At a minimum, you must meet the requirements of paragraphs (b)(1) through (10) of §63.2987:

xi. Inspect all burners, pilot assemblies, and pilot sensing devices for proper operation. Clean pilot sensor if necessary.

xii. Ensure proper adjustment of combustion air and adjust if necessary.

xiii. Inspect, when possible, all internal structures (such as baffles) to ensure structural integrity per the design specifications.

xiv. Inspect dampers, fans, and blowers for proper operation.

xv. Inspect motors for proper operation.

xvi. Inspect, when possible, combustion chamber refractory lining. Clean and repair or replace lining if necessary.

xvii. Inspect the thermal oxidizer shell for proper sealing, corrosion, and hot spots.

xviii. For the burn cycle that follows the inspection, document that the thermal oxidizer is operating properly and make any necessary adjustments.

xix. Generally observe whether the equipment is maintained in good operating condition.

xx. Complete all necessary repairs as soon as practicable.

g. You must establish procedures for responding to operating parameter deviations. At a minimum, the procedures must include the information in paragraphs (c)(1) through (3) of §63.2987.

iv. Procedures for determining the cause of the operating parameter deviation.

v. Actions for correcting the deviation and returning the operating parameters to the allowable ranges or limits.
vi. Procedures for recording the date and time that the deviation began and ended, and the times corrective actions were initiated and completed.

h. Your plan must specify the recordkeeping procedures to document compliance with the emissions and operating limits. Table 1 of this subpart establishes the minimum recordkeeping requirements.

49. The facility must conduct a performance test for each drying and curing oven subject to this subpart according to the provisions in paragraphs (a) through (c) of §63.2991: [Reg.19.304 and 40 C.F.R. §63.2991(a) through (c)]

d. Initially. You must conduct an initial performance test no later than 180 days after the applicable compliance date specified in §63.2985 (at startup). The initial performance test is used to demonstrate initial compliance and establish operating parameter limits and ranges to be used to demonstrate continuous compliance with the emission standards.
e. Every 5 years. You must conduct a performance test every 5 years as part of renewing your 40 CFR part 70 operating permit.
f. To change your OMM plan. You must conduct a performance test according to the requirements specified in §63.2992 to change the limit or range for any operating limit specified in your OMM plan established during a previous compliance test.

50. The facility shall conduct performance tests according to the following provisions: [Reg.19.304 and 40 C.F.R. §63.2992(a) through (f)]

g. You must verify the performance of monitoring equipment as specified in §63.2994 before performing the test.
h. You must conduct the performance test according to the procedures in §63.7(a) through (d), (e)(2) through (4), and (f) through (h).
i. You must conduct the performance test under the conditions specified in paragraphs (c)(1) and (2) of §63.2992.
i. The resin must have the highest specified free-formaldehyde content that will be used.
ii. You must operate at the maximum feasible urea-formaldehyde resin solids application rate (pounds urea-formaldehyde resin solids applied per hour) that will be used.
j. During the performance test, you must monitor and record the operating parameters that you will use to demonstrate continuous compliance after the test. These parameters are listed in table 1 of this subpart.
k. You must conduct performance tests under conditions that are representative of the performance of the affected source. Representative conditions exclude periods of startup and shutdown. You may not conduct performance tests during periods of malfunction. You must record the process information that is necessary to document operating conditions during the test and record an explanation to support that such conditions represent normal operation. Upon request, you must

make available to the Administrator such records as may be necessary to determine the conditions of performance tests.

l. You must conduct three separate test runs for each performance test as specified in §63.7(e)(3), and each test run must last at least 1 hour.

51. The facility shall use the following test methods when conducting performance tests: [Reg.19.304 and 40 C.F.R. §63.2993(a) through (g)]

h. Use EPA Method 1 (40 CFR part 60, appendix A) for selecting the sampling port location and the number of sampling ports.

i. Use EPA Method 2 (40 CFR part 60, appendix A) for measuring the volumetric flow rate.

j. Use EPA Method 3 or 3A (40 CFR part 60, appendix A-2) for measuring oxygen and carbon dioxide concentrations needed to correct formaldehyde concentration measurements to a standard basis.

k. Use EPA Method 4 (40 CFR part 60, appendix A-3) for measuring the moisture content of stack gas.

l. Use EPA Method 316, 318 or 320 (40 CFR part 63, appendix A) for measuring the concentration of formaldehyde.

m. Use the method contained in appendix A of this subpart or the resin purchase specification and the vendor specification sheet for each resin lot for determining the free-formaldehyde content in the urea-formaldehyde resin.

n. Use the method in appendix B of this subpart for determining product loss-on-ignition.

52. The facility shall verify the performance of monitoring equipment according to the following provisions: [Reg.19.304 and 40 C.F.R. §63.2994(a) and (b)]

c. Before conducting the performance test, you must take the steps listed in paragraphs (a)(1) through (3) of §63.2994:

iv. Install and calibrate all process equipment, control devices, and monitoring equipment.

v. Conduct a performance evaluation of the continuous monitoring system (CMS) according to § 63.8(e) which specifies the general requirements and requirements for notifications, the site-specific performance evaluation plan, conduct of the performance evaluation, and reporting of performance evaluation results.

vi. Conduct a performance evaluation of the CPMS according to §63.8(e) which specifies the general requirements and requirements for notifications, the site-specific performance evaluation plan, conduct of the performance evaluation, and reporting of performance evaluation results.

d. If you use a thermal oxidizer, the temperature monitoring device must meet the performance and equipment specifications listed in paragraphs (b)(1) through (3) of §63.2994:

iv. The temperature monitoring device must be installed either at the exit of the combustion zone of each thermal oxidizer, or at the location specified by the manufacturer. The temperature monitoring device must also be

installed in a location before any heat recovery or heat exchange equipment, and it must remain in the same location for both the performance test and the continuous monitoring of temperature.

v. The recorder response range must include zero and 1.5 times the average temperature required in §63.2984(a)(1).

vi. The measurement method or reference method for calibration must be a National Institute of Standards and Technology calibrated reference thermocouple-potentiometer system or an alternate reference subject to the approval of the Administrator.

53. The facility must monitor the parameters listed in table 1 of 40 C.F.R. Part 63 Subpart HHHH and any other parameters specified in your OMM plan. The parameters must be monitored, at a minimum, at the corresponding frequencies listed in the table. During periods when using a non-HAP binder, you are not required to monitor the parameters in Table 1 to Subpart HHHH [Reg.19.304 and 40 C.F.R. §63.2996(a) and (b)]

54. The facility must meet the following monitoring device requirements when using a thermal oxidizer to control formaldehyde emissions: [Reg.19.304 and 40 C.F.R. §63.2997(a) and (b)]

c. If you control formaldehyde emissions using a thermal oxidizer, you must meet the requirements in paragraphs a(1) and (2) of this section:

iii. Install, calibrate, maintain, and operate a device to monitor and record continuously the thermal oxidizer temperature at the exit of the combustion zone before any substantial heat exchange occurs or at the location consistent with the manufacturer's recommendations.

iv. Continuously monitor the thermal oxidizer temperature and determine and record the average temperature in 15-minute and 3-hour block averages. You may determine the average temperature more frequently than every 15 minutes and every 3 hours, but not less frequently

d. If you use the process modifications or a control device other than a thermal oxidizer to control formaldehyde emissions, you must install, calibrate, maintain, and operate devices to monitor the parameters established in your OMM plan at the frequency established in the plan.

55. The facility must maintain records according to the procedures of §63.10 and must maintain the following records: [Reg.19.304 and 40 C.F.R. §63.2998(a) through (i), not (e)]

e. All records required by §63.10. Table 2 of this subpart presents the applicable requirements of the general provisions.

f. The OMM plan.

g. Records of values of monitored parameters listed in table 1 of this subpart to show continuous compliance with each operating limit specified in table 1 of this subpart. If you do not monitor parameters in Table 1 to this subpart during periods when using non-HAP binder, you must record the dates and times that production of mat using non-HAP binder began and ended.

h. Records of maintenance and inspections performed on the control devices.
j. Records specified in §63.6(e)(3)(iii) through (v) are not required to be kept after August 27, 2019 for existing or new drying and curing ovens.
k. After August 27, 2019 for all other affected sources, in the event that an affected source fails to meet an applicable standard, including deviations from an emission limit in §63.2983 or an operating limit in §63.2984, you must record the number of failures and, for each failure, you must:
    i. Record the date, time, and duration of the failure;
    ii. Describe the cause of the failure;
    iii. Record and retain a list of the affected sources or equipment, an estimate of the quantity of each regulated pollutant emitted over any emission limit, and a description of the method used to estimate the emissions; and
    iv. Record actions taken to minimize emissions in accordance with §63.2986(g)(2) and any corrective actions taken to return the affected unit to its normal or usual manner of operation and/or to return the operating parameter to the limit or to within the range specified in the OMM plan, and the dates and times at which corrective actions were initiated and completed.
l. If you operate your process or control device under alternative operating condition and have established operating limits for each condition as specified in §63.2989(c), then you must keep records of the date and time you changed operations from one condition to another, the condition under which you are operating, and the applicable operating limits for that condition.
m. Records showing how the maximum residence time was derived.

56. The facility must maintain each record required by this subpart for 5 years. You must maintain the most recent 2 years of records at the facility. The remaining 3 years of records may be retained offsite. The records must be readily available and in a form so they can be easily inspected and reviewed. You can keep the records on paper or an alternative media, such as microfilm, computer, computer disks, magnetic tape, or on microfiche. You may maintain any records that you submitted electronically via the EPA's Compliance and Emissions Data Reporting Interface (CEDRI) in electronic format. This ability to maintain copies does not affect the requirement for facilities to make records, data, and reports available upon request to a delegated air agency or the EPA as part of an onsite compliance evaluation. [Reg.19.304 and 40 C.F.R. §63.2999(a) through (c)]

57. The facility must submit the following notifications and reports: [Reg.19.304 and 40 C.F.R. §63.3000(a) through (g)]
    a. You must submit all notifications and reports required by the applicable general provisions and §63.3000. Table 2 of this subpart presents the applicable requirements of the general provisions.
    b. Notification of compliance status. You must submit the notification of compliance status, including the performance test results, the operating limits or ranges as determined during the performance test, and other information specified in

§63.9(h), before the close of business on the 60th calendar day after you complete the performance test according to §63.10(d)(2).

c. Semiannual compliance reports. You must submit semiannual compliance reports according to the requirements of paragraphs (c)(1) through (6) not (5) of §63.3000.
    i. Dates for submitting reports. Unless the Administrator has agreed to a different schedule for submitting reports under §63.10(a), you must deliver or postmark each semiannual compliance report no later than 30 days following the end of each semiannual reporting period. The first semiannual reporting period begins on the compliance date for your affected source and ends on June 30 or December 31, whichever date immediately follows your compliance date. Each subsequent semiannual reporting period for which you must submit a semiannual compliance report begins on July 1 or January 1 and ends 6 calendar months later. After February 28, 2019, you are not required to submit quarterly compliance reports.
    ii. Inclusion with Title V report. For each affected source that is subject to permitting regulations pursuant to 40 CFR part 70 or 71, and for which the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 71.6 (a)(3)(iii)(A), you may submit the first and subsequent compliance reports according to the dates the permitting authority has established instead of according to the dates in paragraph (c)(1) of this section.
    iii. Contents of reports. The semiannual compliance report must contain the information in paragraphs (c)(3)(i) through (vi) of §63.3000:
        1. Company name and address.
        2. Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.
        3. Date of report and beginning and ending dates of the reporting period.
        4. A summary of the total duration of continuous parameter monitoring system downtime during the semiannual reporting period and the total duration of continuous parameter monitoring system downtime as a percent of the total source operating time during that semiannual reporting period.
        5. The date of the latest continuous parameter monitoring system certification or audit.
        6. A description of any changes in the wet-formed fiberglass mat manufacturing process, continuous parameter monitoring system, or add-on control device since the last semiannual reporting period.
    iv. No deviations. If there were no deviations from the emission limit in §63.2983 or the operating limits in §63.2984, the semiannual compliance report must include a statement to that effect. If there were no periods during which the continuous parameter monitoring systems were out-of-

control as specified in §63.8(c)(7), the semiannual compliance report must include a statement to that effect.

v. Deviations. For affected sources that commence construction or reconstruction after April 6, 2018, after February 28, 2019, and after August 27, 2019 for all other affected sources, if there was an instance where an affected source failed to meet an applicable standard, including a deviation from the emission limit in §63.2983 or an operating limit in §63.2984, the semiannual compliance report must record the number of failures and contain the information in paragraphs (c)(6)(i) through (ix) of this section:

1. The date, time, and duration of each failure.
2. The date and time that each continuous parameter monitoring system was inoperative, except for zero (low-level) and high-level checks.
3. The date, time, and duration that each continuous parameter monitoring system was out-of-control, including the information in §63.8(c)(8).
4. A list of the affected sources or equipment, an estimate of the quantity of each regulated pollutant emitted over any emission limit, and a description of the method used to estimate the emissions.
5. The date and time that corrective actions were taken, a description of the cause of the failure (including unknown cause, if applicable), and a description of the corrective actions taken.
6. A summary of the total duration of each failure during the semiannual reporting period and the total duration as a percent of the total source operating time during that semiannual reporting period.
7. A breakdown of the total duration of the failures during the semiannual reporting period into those that were due to control equipment problems, process problems, other known causes, and other unknown causes.
8. A brief description of the associated process units.
9. A brief description of the continuous parameter monitoring system.

d. No startup, shutdown, or malfunction plan is required for any affected source that commences construction or reconstruction after April 6, 2018.

e. Performance test reports. You must submit results of each performance test (as defined in §63.2) required by this subpart no later than 60 days after completing the test as specified in §63.10(d)(2). You must include the values measured during the performance test for the parameters listed in Table 1 of this subpart and the operating limits or ranges that you will include in your OMM plan. For the thermal oxidizer temperature, you must include 15-minute averages and the average for the three 1-hour test runs. For affected sources that commence construction or reconstruction after April6, 2018, beginning February 28, 2019, and beginning no later than August 27, 2019 for all other affected sources, you

must submit the results following the procedures specified in paragraphs (e)(1) through (3) of this section.

i. For data collected using test methods supported by the EPA's Electronic Reporting Tool (ERT) as listed on the EPA's ERT website (*https://www.epa.gov/electronic-reporting-air-emissions/electronic-reporting-tool-ert*) at the time of the test, you must submit the results of the performance test to the EPA via CEDRI (CEDRI can be accessed through the EPA's Central Data Exchange (CDX) (*https://cdx.epa.gov/*). You must submit performance test data in a file format generated through the use of the EPA's ERT or an alternate electronic file format consistent with the extensible markup language (XML) schema listed on the EPA's ERT website.

ii. For data collected using test methods that are not supported by the EPA's ERT as listed on the EPA's ERT website at the time of the test, you must submit the results of the performance test to the Administrator at the appropriate address listed in §63.13, unless the Administrator agrees to or specifies an alternate reporting method.

iii. If you claim that some of the performance test information you are submitting under paragraph (e)(1) is confidential business information (CBI), you must submit a complete file generated through the use of the EPA's ERT or an alternate electronic file consistent with the XML schema listed on the EPA's ERT website, including information claimed to be CBI, on a compact disk, flash drive or other commonly used electronic storage medium to the EPA. You must clearly mark the electronic medium as CBI and mail to U.S.EPA/OAQPS/CORE CBI omitted to the EPA via the EPA's CDX as described in paragraph (e)(1) of this section.

f. Claims of EPA system outage. If you are required to electronically submit a report through the CEDRI in the EPA's CDX, you may assert a claim of EPA outage for failure to timely comply with the reporting requirement. To assert a claim of EPA system outage, you must meet the requirements outlined in paragraphs (f)(1) through (7) of this section.

i. You must have been or will be precluded from accessing CEDRI and submitting a required test report within the time prescribed due to an outage of either the EPA's CEDRI or CDX Systems.

ii. The outage must have occurred within the period of time beginning five business days prior to the date that the submission is due.

iii. The outage may be planned or unplanned.

iv. You must submit notification to the Administrator in writing as soon as possible following the date you first knew, or through due diligence should have known, that the event may cause or has caused a delay in reporting.

v. You must provide to the Administrator a written description identifying:

1. The date(s) and time(s) when CDX or CEDRI was accessed and the system was unavailable;

2. A rationale for attributing the delay in reporting beyond the regulatory deadline to EPA system outage;
3. Measures take or to be taken to minimize the delay in reporting; and
4. The date by which you propose to report, or if you have already met the reporting requirement at the time of the notification, the date you reported.

vi. The decision to accept the claim of EPA system outage and allow an extension to the reporting deadline is solely within the discretion of the Administrator.

vii. In any circumstance, the report must be submitted electronically as soon as possible after the outage is resolved.

g. Claims of force majeure. If you are required to electronically submit a report through CEDRI in the EPA's CDX, you may assert a claim of force majeure for failure to timely comply with the reporting requirement. To assert a claim of force majeure, you must meet the requirements outlined in paragraphs (g)(1) through (5) of this section.

i. You may submit a claim if a force majeure event is about to occur, occurs, or has occurred or there are lingering effects from such an event within the period of time beginning five business days prior to the date the submission is due. For the purposes of this section, a force majeure event is defined as an event that will be or has been caused by circumstances beyond the control of the affected facility, its contractors, or any entity controlled by the affected facility that prevents you from complying with the requirements to submit a report electronically within the time period prescribed. Examples of such events are acts of nature (e.g., hurricanes, earthquakes, or floods), acts of war or terrorism, or equipment failure or safety hazard beyond the control of the affected facility (e.g., large scale power outage).

ii. You must submit notification to the Administrator in writing as soon as possible following the date you first knew, or through due diligence should have known, that the event may cause or has caused a delay in reporting.

iii. You must provide to the Administrator:

1. A written description of the force majeure event;
2. A rationale for attributing the delay in reporting beyond the regulatory deadline to the force majeure event;
3. Measures taken or to be taken to minimize the delay in reporting; and
4. The date by which you propose to report, or if you have already met the reporting requirement at the time of the notification, the date you reported.

iv. The decision to accept the claim of force majeure and allow an extension to the reporting deadline is solely within the discretion of the Administrator.

v. In any circumstance, the reporting must occur as soon as possible after the force majeure event occurs.

58. The facility must comply with the requirements of the general provisions of 40 C.F.R. Part 63, subpart A, as specified in table 2 of 40 C.F.R. Part 63 Subpart HHHH. [Reg.19.304 and 40 C.F.R. §63.3001]

SN-12
Former/Saturator and Fugitive emissions and Wet End Building Exhaust

Source Description

After exiting the pulping system, the thick stock is deposited on a moving wire screen in the forming system. In the forming system, excess liquid is removed from the screen through drainage and a vacuum and is returned to the process as white water. A resin, mixed in the binder room, is applied to the glass fiber mat, saturating the mat. The air from the former/saturator vacuum system lines (Suction Tube Hydroformer, Dry Suction Vacuum, and White Water Vacuum Pump) are routed through a series of moisture separators and vented to the RTO stack, without control.

The binder is applied using a flooding weir. Excess binder is removed and recirculated by a combination of natural drainage and vacuum slots. The air from the vacuum lines (the Binder Applicator Fan, the Binder Control Fan, and the Transfer Roll Vacuum Fan) is routed through a series of moisture separators to remove entrained liquid prior to venting to the atmosphere through the RTO stack, without control (SN-11) for better dispersion. In addition, fugitive emissions from the mat line are not exhausted through roof vents over the production line, but are rather collected and vented to the atmosphere through the RTO stack, without control.

Other emissions from the process and fugitive emissions from the building are not controlled by the RTO, but will be routed to the RTO stack, without control.

Specific Conditions

59. The permittee shall not exceed the emission rates set forth in the following table. Emission rates are based on stack testing and are considered to represent worst case. [Reg.19.501 *et seq.* and 40 C.F.R. § 52 Subpart E]

SN	Description	Pollutant	lb/hr	tpy
12	Former/Saturator and Fugitive Emissions and Wet End Building Exhaust	PM_{10}	0.5	2.1
		$PM_{2.5}$	0.5	2.1
		VOC	9.3	40.6

60. The permittee shall not exceed the emission rates set forth in the following table. Emission rates are based on stack testing and are considered to represent worst case. [Reg.18.801 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]

SN	Description	Pollutant	lb/hr	tpy
12	Former/Saturator and Fugitive Emissions and Wet End Building Exhaust Exhaust	PM	0.5	2.1
		Acrylic Acid	0.47	2.05
		Formaldehyde	0.39	1.71
		Methanol	1.98	8.67
		Styrene	0.10	0.43
		Triethylamine	0.10	0.43
		Ammonia	0.47	2.05

SN-13
Binder Room

Source Description

Binder is delivered to the site in a variety of ways, including tank trucks, drums, and bags. High volume ingredients are stored in permanent tanks, while minor ingredients are stored in drums or totes. The binder room is where components are mixed together in a mix tank according to a binder recipe. Emissions from the binder mix tanks and the binder circulation tanks are collected and vented to the atmosphere.

Specific Conditions

61. The permittee shall not exceed the emission rates set forth in the following table. Emission rates are based on stack testing and are considered to represent worst case. [Reg.19.501 *et seq.* and 40 C.F.R. § 52 Subpart E]

SN	Description	Pollutant	lb/hr	Tpy
13	Binder Room	VOC	2.0	8.8

62. The permittee shall not exceed the emission rates set forth in the following table. Emission rates are based on stack testing and are considered to represent worst case. [Reg.18.801 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]

SN	Description	Pollutant	lb/hr	tpy
13	Binder Room	Acrylic Acid	0.50	2.19
		Formaldehyde	0.01	0.05
		Methanol	1.00	4.38
		Styrene	0.10	0.44
		Triethylamine	0.10	0.44
		Ammonia	0.50	2.19

SN-14
Waste Trim Dust Collector

Source Description

After the saturated mats have been dried and cured, the mats are trimmed, rolled and packaged. The mat trimmings are then pneumatically conveyed to a waste trimmer dust collector. The conveying air is sent to the dust collector while the trimmings are fed into a compactor.

Specific Conditions

63. The permittee shall not exceed the emission rates set forth in the following table. Emission rates are based on stack testing and are considered to represent worst case. [Reg.19.501 *et seq.* and 40 C.F.R. § 52 Subpart E]

SN	Description	Pollutant	lb/hr	tpy
14	Waste Trim Dust Collector	PM_{10}	1.0	4.1
		$PM_{2.5}$	1.0	4.1
		VOC	1.9	8.4

64. The permittee shall not exceed the emission rates set forth in the following table. Emission rates are based on stack testing and are considered to represent worst case. [Reg.18.801 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]

SN	Description	Pollutant	lb/hr	tpy
14	Waste Trim Dust Collector	PM	1.0	4.1
		Acrylic Acid	0.42	1.84
		Formaldehyde	0.35	1.54
		Methanol	0.91	3.99
		Styrene	0.10	0.44
		Triethylamine	0.10	0.44
		Ammonia	0.42	1.84

65. Visible emissions may not exceed the limits specified in the following table of this permit as measured by EPA Reference Method 9.

SN	Limit	Regulatory Citation
14	5%	Regulation 18, §18.501 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311

66. The permittee shall conduct weekly observations of the opacity from source SN-14 and keep a record of these observations. These observations shall be conducted by a person familiar with the permittee's visible emissions. If visible emissions which appear to be in excess of the permitted opacity are detected, the permittee shall immediately take action to identify the cause of the visible emissions, implement corrective action, and document that visible emissions did not appear to be in excess of the permitted opacity following the corrective action. If after corrective action is taken the emissions still appear to exceed the permitted opacity, a Method 9 reading shall be performed. The permittee shall maintain records of the cause of any visible emissions and the corrective action taken. The permittee must keep these records onsite and make them available to Department personnel upon request. [Regulation, §18.501 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

SN-15
Diesel-Fired Emergency Fire Pump

Source Description

SN-15 Diesel-Fired Emergency Fire Pump is subject to NESHAP 40 C.F.R. Part 63 Subpart ZZZZ and NSPS 40 C.F.R. Part 60 Subpart IIII.

Specific Conditions

67. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by complying with Specific Conditions #70 through #83. [Reg.19.501 *et seq.* and 40 C.F.R. § 52 Subpart E]

SN	Description	Pollutant	lb/hr	tpy
15	Diesel-Fired Emergency Fire Pump	PM_{10}	0.1	0.1
		$PM_{2.5}$	0.1	0.1
		SO_2	0.5	0.2
		VOC	0.1	0.1
		CO	0.8	0.2
		NO_x	1.2	0.3

68. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by complying with Specific Conditions #70 through #83. [Reg.18.801 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]

SN	Description	Pollutant	lb/hr	tpy
15	Diesel-Fired Emergency Fire Pump	PM	0.1	0.1
		Formaldehyde	0.01	0.01
		Other HAPs	0.01	0.01

69. Visible emissions may not exceed the limits specified in the following table of this permit as measured by EPA Reference Method 9. [Reg.19.503 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]

SN	Limit	Regulatory Citation
15	20%	Regulation 19, §19.503 and 40 CFR Part 52, Subpart E

70. The permittee shall conduct an annual observation of the opacity from SN-15 (when operating), and keep a record of these observations. If the permittee detects visible emissions, the permittee must immediately conduct a 6 minute opacity reading in accordance with EPA Reference Method #9 and must take action to identify and correct the cause of the visible emissions. Results of these observations or readings shall be recorded in a log. After implementing the corrective action, the permittee must document that the source complies with the visible emissions requirements. The permittee shall maintain records of the cause of any visible emissions and the corrective action taken. The permittee must keep these records onsite and make them available to Department personnel upon request. [Ark. Code Ann. §8-4-203 as referenced by §8-4-304 and §8-4-311]

71. The permittee shall not operate the emergency generator SN-15 in excess of 500 total hours (emergency and non-emergency) per calendar year in order to demonstrate compliance with the annual emission rate limits. Emergency operation in excess of these hours may be allowable but shall be reported and will be evaluated in accordance with Reg.19.602 and other applicable regulations. [Reg.19.705, Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311, and 40 C.F.R. § 70.6]

72. The permittee shall maintain monthly records to demonstrate compliance with Specific Condition #71. The permittee shall update these records by the fifteenth day of the month following the month to which the records pertain. The calendar year totals and each individual month's data shall be maintained on-site, made available to Department personnel upon request, and submitted in accordance with General Provision #7. [Reg.19.705 and 40 C.F.R. § 52 Subpart E]

40 C.F.R. § 63 Subpart ZZZZ Condition for Emergency Compression Ignition Engines ≤ 500 HP (Constructed or Reconstructed On or After 6-12-2006) at a Major Source

73. SN-15 is subject to 40 C.F.R. § 63 Subpart ZZZZ. The permittee shall meet the requirements of 40 C.F.R. § 63 Subpart ZZZZ by meeting the requirements of 40 C.F.R. § 60 Subpart IIII. [Reg.19.304 and 40 C.F.R. § 63.6590(c)(6)]

40 C.F.R. § 60 Subpart IIII Conditions for Fire Pump Compression Ignition Engines < 30 L/Cylinder (Constructed After 7-11-2005 and Manufactured After 7-1-2006)

74. SN-15 is subject to 40 C.F.R. § 60 Subpart IIII. The permitee shall comply with all applicable provisions of 40 C.F.R. § 60 Subpart IIII which includes, but is not limited to, Specific Conditions #75 through #90. [Reg.19.304 and 40 C.F.R. § 60 Subpart IIII]

75. The permittee must comply with the emission standards in the table below for all pollutants. [Reg.19.304 and 40 C.F.R. § 60.4205(c) and Table 4 to 40 C.F.R. § 60 Subpart IIII]

Maximum engine power	**Model year(s)**	**NMHC + NO_X g/KW-hr (g/HP-hr)**	**CO g/KW-hr (g/HP-hr)**	**PM g/KW-hr (g/HP-hr)**
KW<8 (HP<11)	2010 and earlier	10.5 (7.8)	8.0 (6.0)	1.0 (0.75)
	2011 +	7.5 (5.6)		0.40 (0.30)
8≤KW<19 (11≤HP<25)	2010 and earlier	9.5 (7.1)	6.6 (4.9)	0.80 (0.60)
	2011 +	7.5 (5.6)		0.40 (0.30)
19≤KW<37 (25≤HP<50)	2010 and earlier	9.5 (7.1)	5.5 (4.1)	0.80 (0.60)
	2011 +	7.5 (5.6)		0.30 (0.22)
37≤KW<56 (50≤HP<75)	2010 and earlier	10.5 (7.8)	5.0 (3.7)	0.80 (0.60)
	2011 +[1]	4.7 (3.5)		0.40 (0.30)
56≤KW<75 (75≤HP<100)	2010 and earlier	10.5 (7.8)	5.0 (3.7)	0.80 (0.60)
	2011 +[1]	4.7 (3.5)		0.40 (0.30)
75≤KW<130 (100≤HP<175)	2009 and earlier	10.5 (7.8)	5.0 (3.7)	0.80 (0.60)
	2010 +[2]	4.0 (3.0)		0.30 (0.22)
130≤KW<225 (175≤HP<300)	2008 and earlier	10.5 (7.8)	3.5 (2.6)	0.54 (0.40)
	2009 +[3]	4.0 (3.0)		0.20 (0.15)
225≤KW<450 (300≤HP<600)	2008 and earlier	10.5 (7.8)	3.5 (2.6)	0.54 (0.40)
	2009 +[3]	4.0 (3.0)		0.20 (0.15)
450≤KW≤560 (600≤HP≤750)	2008 and earlier	10.5 (7.8)	3.5 (2.6)	0.54 (0.40)
	2009 +	4.0 (3.0)		0.20 (0.15)
KW>560 (HP>750)	2007 and earlier	10.5 (7.8)	3.5 (2.6)	0.54 (0.40)
	2008 +	6.4 (4.8)		0.20 (0.15)

[1]For model years 2011-2013, manufacturers, owners and operators of fire pump stationary CI ICE in this engine power category with a rated speed of greater than 2,650 revolutions per minute (rpm) may comply with the emission limitations for 2010 model year engines.
[2]For model years 2010-2012, manufacturers, owners and operators of fire pump stationary CI ICE in this engine power category with a rated speed of greater than 2,650 rpm may comply with the emission limitations for 2009 model year engines.

[3]In model years 2009-2011, manufacturers of fire pump stationary CI ICE in this engine power category with a rated speed of greater than 2,650 rpm may comply with the emission limitations for 2008 model year engines.

76. The permittee must operate and maintain stationary CI ICE that achieve the emission standards as required in § 60.4205 over the entire life of the engine. [Reg.19.304 and 40 C.F.R. § 60.4206]

77. The permittee must use diesel fuel that meets the requirements of 40 C.F.R. § 80.510(b) for nonroad diesel fuel. [Reg.19.304 and 40 C.F.R. § 60.4207(b)]

78. Stationary CI ICE that have a national security exemption under § 60.4200(d) are also exempt from the fuel requirements in § 60.4207. [Reg.19.304 and 40 C.F.R. § 60.4207(e)]

79. In addition to the requirements specified in §§ 60.4201, 60.4202, 60.4204, and 60.4205, it is prohibited to import stationary CI ICE with a displacement of less than 30 liters per cylinder that do not meet the applicable requirements specified in § 60.4208(a) through (g) after the dates specified in § 60.4208(a) through (g). [Reg.19.304 and 40 C.F.R. § 60.4208(h)]

80. The requirements of this section do not apply to owners or operators of stationary CI ICE that have been modified, reconstructed, and do not apply to engines that were removed from one existing location and reinstalled at a new location. [Reg.19.304 and 40 C.F.R. § 60.4208(i)]

81. The permittee must install a non-resettable hour meter prior to startup of the engine. [Reg.19.304 and 40 C.F.R. § 60.4209(a)]

82. If you are an owner or operator of a stationary CI internal combustion engine equipped with a diesel particulate filter to comply with the emission standards in § 60.4204, the diesel particulate filter must be installed with a backpressure monitor that notifies the owner or operator when the high backpressure limit of the engine is approached. [Reg.19.304 and 40 C.F.R. § 60.4209(b)]

83. If you are an owner or operator and must comply with the emission standards specified in 40 C.F.R. § 60 Subpart IIII, you must do all of the following, except as permitted under § 60.4211(g): [Reg.19.304 and 40 C.F.R. § 60.4211(a)]
    a. Operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's emission-related written instructions; [Reg.19.304 and 40 C.F.R. § 60.4211(a)(1)]
    b. Change only those emission-related settings that are permitted by the manufacturer; and [Reg.19.304 and 40 C.F.R. § 60.4211(a)(2)]
    c. Meet the requirements of 40 C.F.R. §§ 89, 94 and/or 1068, as they apply to you. [Reg.19.304 and 40 C.F.R. § 60.4211(a)(3)]

84. If you are an owner or operator of a CI fire pump engine that is manufactured prior to the model years in table 3 to 40 C.F.R. § 60 Subpart IIII and must comply with the emission standards specified in § 60.4205(c), you must demonstrate compliance according to one of the methods specified in § 60.4211(b)(1) through (5). [Reg.19.304 and 40 C.F.R. § 60.4211(b)]
    a. Purchasing an engine certified according to 40 C.F.R. § 89 or 40 C.F.R. § 94, as applicable, for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's specifications. [Reg.19.304 and 40 C.F.R. § 60.4211(b)(1)]
    b. Keeping records of performance test results for each pollutant for a test conducted on a similar engine. The test must have been conducted using the same methods specified in 40 C.F.R. § 60 Subpart IIII and these methods must have been followed correctly. [Reg.19.304 and 40 C.F.R. § 60.4211(b)(2)]
    c. Keeping records of engine manufacturer data indicating compliance with the standards. [Reg.19.304 and 40 C.F.R. § 60.4211(b)(3)]
    d. Keeping records of control device vendor data indicating compliance with the standards. [Reg.19.304 and 40 C.F.R. § 60.4211(b)(4)]
    e. Conducting an initial performance test to demonstrate compliance with the emission standards according to the requirements specified in § 60.4212, as applicable. [Reg.19.304 and 40 C.F.R. § 60.4211(b)(5)]

85. If you are an owner or operator of a CI fire pump engine the is manufactured during or after the model year that applies to your fire pump engine rating in table 3 to 40 C.F.R. § 60 Subpart IIII and must comply with the emission standards specified in § 60.4205(c), the permittee must demonstrate compliance by purchasing an engine certified to the emission standards in § 60.4205(c) for the same model year and NFPA nameplate engine power. The engine must be installed and configured according to the manufacturer's emission-related specifications, except as permitted in § 60.4211(g). [Reg.19.304 and 40 C.F.R. § 60.4211(c)]

86. The permittee must operate the emergency stationary ICE according to the requirements in § 60.4211(f)(1) through (3). In order for the engine to be considered an emergency stationary ICE under 40 C.F.R. § 60 Subpart IIII, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as described in § 60.4211(f)(1) through (3), is prohibited. If you do not operate the engine according to the requirements in § 60.4211(f)(1) through (3), the engine will not be considered an emergency engine under 40 C.F.R. § 60 Subpart IIII and must meet all requirements for non-emergency engines. [Reg.19.304 and 40 C.F.R. § 60.4211(f)]
    a. There is no time limit on the use of emergency stationary ICE in emergency situations. [Reg.19.304 and 40 C.F.R. § 60.4211(f)(1)]
    b. The permittee may operate the emergency stationary ICE for any combination of the purposes specified in § 60.4211(f)(2)(i) for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by

§ 60.4211(f)(3) counts as part of the 100 hours per calendar year allowed by § 60.4211(f)(2). [Reg.19.304 and 40 C.F.R. § 60.4211(f)(2)]

i. Emergency stationary ICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year. [Reg.19.304 and 40 C.F.R. § 60.4211(f)(2)(i)]

c. Emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing provided in § 60.4211(f)(2). Except as provided in § 60.4211(f)(3)(i), the 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity. [Reg.19.304 and 40 C.F.R. § 60.4211(f)(3)]

i. The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met: [Reg.19.304 and 40 C.F.R. § 60.4211(f)(3)(i)]

1. The engine is dispatched by the local balancing authority or local transmission and distribution system operator; [Reg.19.304 and 40 C.F.R. § 60.4211(f)(3)(i)(A)]
2. The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region. [Reg.19.304 and 40 C.F.R. § 60.4211(f)(3)(i)(B)]
3. The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines. [Reg.19.304 and 40 C.F.R. § 60.4211(f)(3)(i)(C)]
4. The power is provided only to the facility itself or to support the local transmission and distribution system. [Reg.19.304 and 40 C.F.R. § 60.4211(f)(3)(i)(D)]
5. The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator

may keep these records on behalf of the engine owner or operator. [Reg.19.304 and 40 C.F.R. § 60.4211(f)(3)(i)(E)]

87. If you do not install, configure, operate, and maintain your engine and control device according to the manufacturer's emission-related written instructions, or you change emission-related settings in a way that is not permitted by the manufacturer, you must demonstrate compliance as follows: [Reg.19.304 and 40 C.F.R. § 60.4211(g)]

a. If you are an owner or operator of a stationary CI internal combustion engine with maximum engine power less than 100 HP, you must keep a maintenance plan and records of conducted maintenance to demonstrate compliance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, if you do not install and configure the engine and control device according to the manufacturer's emission-related written instructions, or you change the emission-related settings in a way that is not permitted by the manufacturer, you must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of such action. [Reg.19.304 and 40 C.F.R. § 60.4211(g)(1)]

b. If you are an owner or operator of a stationary CI internal combustion engine greater than or equal to 100 HP and less than or equal to 500 HP, you must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after you change emission-related settings in a way that is not permitted by the manufacturer. [Reg.19.304 and 40 C.F.R. § 60.4211(g)(2)]

c. If you are an owner or operator of a stationary CI internal combustion engine greater than 500 HP, you must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after you change emission-related settings in a way that is not permitted by the manufacturer. You must conduct subsequent performance testing every 8,760 hours of engine operation or 3 years, whichever comes first, thereafter to demonstrate compliance with the applicable emission standards. [Reg.19.304 and 40 C.F.R. § 60.4211(g)(3)]

88. Owners and operators of stationary CI ICE with a displacement of less than 30 liters per cylinder who conduct performance tests pursuant to 40 C.F.R. § 60 Subpart IIII must do so according to § 60.4212(a) through (e). [Reg.19.304 and 40 C.F.R. § 60.4212]

89. The permittee is not required to submit an initial notification. Starting with the model years in the table below, if the emergency engine does not meet the standards applicable to non-emergency engines in the applicable model year, the owner or operator must keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The owner must record the time of operation of the engine and the reason the engine was in operation during that time. [Reg.19.304 and 40 C.F.R. § 60.4214(b) and Table 5 to 40 C.F.R. § 60 Subpart IIII]

Engine power	**Starting model year**
19≤KW<56 (25≤HP<75)	2013
56≤KW<130 (75≤HP<175)	2012
KW≥130 (HP≥175)	2011

90. If the stationary CI internal combustion engine is equipped with a diesel particulate filter, the owner or operator must keep records of any corrective action taken after the backpressure monitor has notified the owner or operator that the high backpressure limit of the engine is approached. [Reg.19.304 and 40 C.F.R. § 60.4214(c)]

91. Table 8 to 40 C.F.R. § 60 Subpart IIII shows which parts of the General Provisions in §§ 60.1 through 60.19 apply to you. [Reg.19.304 and 40 C.F.R. § 60.4218]

SECTION V: COMPLIANCE PLAN AND SCHEDULE

Owens Corning Non-Woven Technology, LLC will continue to operate in compliance with those identified regulatory provisions. The facility will examine and analyze future regulations that may apply and determine their applicability with any necessary action taken on a timely basis.

SECTION VI: PLANTWIDE CONDITIONS

1. The permittee shall notify the Director in writing within thirty (30) days after commencing construction, completing construction, first placing the equipment and/or facility in operation, and reaching the equipment and/or facility target production rate. [Reg.19.704, 40 C.F.R. § 52 Subpart E, and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]

2. If the permittee fails to start construction within eighteen months or suspends construction for eighteen months or more, the Director may cancel all or part of this permit. [Reg.19.410(B) and 40 C.F.R. § 52 Subpart E]

3. The permittee must test any equipment scheduled for testing, unless otherwise stated in the Specific Conditions of this permit or by any federally regulated requirements, within the following time frames: (1) new equipment or newly modified equipment within sixty (60) days of achieving the maximum production rate, but no later than 180 days after initial start up of the permitted source or (2) operating equipment according to the time frames set forth by the Division of Environmental Quality or within 180 days of permit issuance if no date is specified. The permittee must notify the Division of Environmental Quality of the scheduled date of compliance testing at least fifteen (15) business days in advance of such test. The permittee shall submit the compliance test results to the Division of Environmental Quality within sixty (60) calendar days after completing the testing. [Reg.19.702 and/or Reg.18.1002 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]

4. The permittee must provide:

    a. Sampling ports adequate for applicable test methods;
    b. Safe sampling platforms;
    c. Safe access to sampling platforms; and
    d. Utilities for sampling and testing equipment.

    [Reg.19.702 and/or Reg.18.1002 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]

5. The permittee must operate the equipment, control apparatus and emission monitoring equipment within the design limitations. The permittee shall maintain the equipment in good condition at all times. [Reg.19.303 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]

6. This permit subsumes and incorporates all previously issued air permits for this facility. [Reg. 26 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]

7. Unless otherwise specified in the permit, approval to construct any new major stationary source or a major modification subject to 40 C.F.R. § 52.21 shall become invalid if construction is not commenced within 18 months after receipt of such approval, if construction is discontinued for a period of 18 months or more, or if construction is not completed within a reasonable time. The Division of Environmental Quality may extend the 18-month period upon a satisfactory showing that an extension is justified. [Reg.19.901 *et seq.* and 40 C.F.R. § 52 Subpart E]

Line #1 Conditions (SN-01, SN-03, SN-04, SN-05 and SN-07) Conditions

8. The permittee shall not exceed a throughput of 55,100 tons of fiberglass mat finished product per rolling 12 month period. [Reg.19.705, Reg.18.1004, Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311, and 40 C.F.R. § 70.6]

9. The permittee shall maintain monthly records to demonstrate compliance with Plantwide Condition #7. The permittee shall update these records by the fifteenth day of the month following the month to which the records pertain. The twelve month rolling totals and each individual month's data shall be maintained on-site, made available to Department personnel upon request, and submitted in accordance with General Provision #7. [Reg.19.705, 40 C.F.R. § 52 Subpart E, Reg.18.1004 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]

Line #1 to Line #2 Transition Period Conditions

10. After Line #2 starts up, the permittee shall operate in a temporary transitional operating scenario which allows both the existing Line 1 and Line 2 to operate simultaneously for no more than 12 consecutive months. [Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]

11. During the temporary transitional operating scenario, the total production for both Line #1 and Line #2 will be limited to 55,100 tons/yr of finished mats. [Reg.19.705, Reg.18.1004, Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311, and 40 C.F.R. § 70.6]

12. The transitional operating scenario period will end when the permittee notifies the Administration that the shutdown of Line #1 is finalized. [Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]

13. After the shutdown of Line #1 is finalized, the permittee shall submit an Administrative Amendment to modify the permit to remove Line #1 and the associated conditions and emission limits with Line #1. [Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]

14. The permittee shall maintain monthly records to demonstrate compliance with Plantwide Condition #10. The permittee shall update these records by the fifteenth day of the

month following the month to which the records pertain. The twelve month rolling totals and each individual month's data shall be maintained on-site, made available to Department personnel upon request, and submitted in accordance with General Provision #7. [Reg.19.705, 40 C.F.R. § 52 Subpart E, Reg.18.1004 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]

Line #2 Conditions (SN-11, SN-12, SN-13, SN-14, and SN-15) Conditions

15. The permittee shall not exceed a throughput of 133,000 tons of fiberglass mat finished product per rolling 12 month period. [Reg.19.705, Reg.18.1004, Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311, and 40 C.F.R. § 70.6]

16. The permittee shall maintain monthly records to demonstrate compliance with Plantwide Condition #14. The permittee shall update these records by the fifteenth day of the month following the month to which the records pertain. The twelve month rolling totals and each individual month's data shall be maintained on-site, made available to Department personnel upon request, and submitted in accordance with General Provision #7. [Reg.19.705, 40 C.F.R. § 52 Subpart E, Reg.18.1004 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]

17. The permittee shall conduct initial stack testing to verify the emission rates established for sources SN-11, SN-12, SN-13 and SN-14. While performing the tests, the equipment shall be operating at least 90% of the maximum throughput rate, unless otherwise approved by the Department. If testing is conducted at a rate lower than 90%, the facility shall be limited to an operating rate of 110% of the tested rate until compliance at a higher rate is demonstrated. The permittee may employ a bypass line that can allow the SN-12 emissions to exhaust to the atmosphere during stack testing of the RTO control device. If a test result indicates emissions in excess of a permitted rate, the permittee shall conduct a new stack test for that pollutant within 90 days of the date of the last failing stack test. In addition, the permittee shall submit a permit application to modify and/or re-evaluate compliance testing mechanisms. Testing shall be conducted in accordance with Plantwide Condition #3. The results of these tests shall be submitted to the Department at the address listed in General Provision #7. The following table outlines the last testing dates. [Reg.19.702 and 40 C.F.R. § 52 Subpart E; Reg.18.1002 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]

SN	Description	Pollutant	Last Test Date
11	Regenerative Thermal Oxidizer	PM/PM_{10} VOC Acrylic Acid Formaldehyde Methanol Ammonia	N/A

SN	Description	Pollutant	Last Test Date
12	Former/Saturator and Fugitive Emissions and Wet End Building Exhaust	VOC Acrylic Acid Formaldehyde Methanol Ammonia	N/A
13	Binder Room	VOC Acrylic Acid Formaldehyde Methanol Ammonia	N/A
14	Waste Trim Dust Collector	PM/PM_{10} VOC Acrylic Acid Formaldehyde Methanol Ammonia	N/A

18. The permittee shall conduct periodic stack testing to verify the emission rates for all pollutants established by this permit for sources SN-11, SN-12, SN-13 and SN-14. This testing shall be performed a minimum of once every five (5) years. While performing the tests, the equipment shall be operating at least 90% of the maximum throughput rate, unless otherwise approved by the Department. If testing is conducted at a rate lower than 90%, the facility shall be limited to an operating rate of 110% of the tested rate until compliance at a higher rate is demonstrated. The permittee may employ a bypass line that can allow the SN-12 emissions to exhaust to the atmosphere during stack testing of the RTO control device. If a test result indicates emissions in excess of a permitted rate, the permittee shall conduct a new stack test for that pollutant within 90 days of the date of the last failing stack test. Testing shall be conducted in accordance with Plantwide Condition #3. The results of these tests shall be submitted to the Department at the address listed in General Provision #7. The following table outlines the last testing dates. [Reg.19.702 and 40 C.F.R. § 52 Subpart E; Reg.18.1002 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]

SN	Description	Pollutant	Last Test Date
11	Regenerative Thermal Oxidizer	VOC Acrylic Acid Formaldehyde	N/A

SN	Description	Pollutant	Last Test Date
12	Former/Saturator and Fugitive Emissions and Wet End Building Exhaust	VOC Acrylic Acid Formaldehyde	N/A
13	Binder Room	VOC Acrylic Acid Formaldehyde	N/A
14	Waste Trim Dust Collector	VOC Acrylic Acid Formaldehyde	N/A

SECTION VII: INSIGNIFICANT ACTIVITIES

The Division of Environmental Quality deems the following types of activities or emissions as insignificant on the basis of size, emission rate, production rate, or activity in accordance with Group A of the Insignificant Activities list found in Regulation 18 and Regulation 19 Appendix A. Group B insignificant activities may be listed but are not required to be listed in permits. Insignificant activity emission determinations rely upon the information submitted by the permittee in an application dated May 14, 2019. [Reg.26.304 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]

Description	Category
Empty Storage Tank (910 gal) – B1	Group A, #13
Latex/Resin Tank (7,059 gal) – B2	Group A, #13
Latex/Resin Storage Tank (32,682 gal) – B4	Group A, #13
Latex/Resin Storage Tank (14,362 gal) – B5	Group A, #13
(2) Latex/Resin Storage Tanks (22,800 gal each) – B3 and B6	Group A, #13
Small Cooling Tower	Group A, #13
Wastewater Treatment Plant	Group A, #13
Trim Drop-Out Box	Group A, #13
Comfort Heaters	Group B, #2
Water Heaters (non-process)	Group B, #73
Laboratory Equipment	Group B, #34
Diesel Tank (55 gal) (mower & tractor fuel)	Group B, #14
Biocide Storage Tote (400 gal) (vented indoors)	Group B, #21
Ferric Chloride Storage Tank W1 (8,221 gal)	Group B, #21
Lime Slurry Mix Tank W5	Group B, #21
Polymer Storage Tank W17	Group B, #21
3 UF Resin Bulk Tanks T-01, 02, 03	Group A, #13
2 Latex Bulk Tanks T-04, 05	Group A, #13
3 Acrylic Tanks T-17, 18, 19	Group A, #13
Dispersant Tank T-06	Group A, #3
Bleach Tank T-07	Group A, #3

Description	Category
Antifoam Tank T-08	Group A, #3
Viscosity Modifier Bulk Tank T-09	Group A, #3
Viscosity Modifier Day Tank T-10	Group A, #10
Polyacrylic Acid Tank T-11	Group A, #13
Binder Mix Tank T-12	Group A, #3
Binder Holding Tank T-13	Group A, #13
Starch Handling Hopper T-14 (slurry)	Group A, #3
Starch Handling Mix Tank T-15 (slurry)	Group A, #3
Catalyst Tank T-16	Group A, #13
Ammonia Storage Tank/Tote T-20	Group A, #13
DBNPA Tank/Tote T-21	Group A, #13
Bromine Storage Tank/Tote T-22	Group A, #13
Biocide Tank/Tote T-23	Group A, #13
Antifoam Tank/Tote T-24	Group A, #13
Binder Wastewater EQ Tank T-25	Group A, #13
Binder Seal Tank T-26	Group A, #13
Binder Weir Tank T-27	Group A, #13
White Water EQ Tank T-28	Group A, #13

SECTION VIII: GENERAL PROVISIONS

1. Any terms or conditions included in this permit which specify and reference Arkansas Pollution Control & Ecology Commission Regulation 18 or the Arkansas Water and Air Pollution Control Act (Ark. Code Ann. § 8-4-101 *et seq.*) as the sole origin of and authority for the terms or conditions are not required under the Clean Air Act or any of its applicable requirements, and are not federally enforceable under the Clean Air Act. Arkansas Pollution Control & Ecology Commission Regulation 18 was adopted pursuant to the Arkansas Water and Air Pollution Control Act (Ark. Code Ann. § 8-4-101 *et seq.*). Any terms or conditions included in this permit which specify and reference Arkansas Pollution Control & Ecology Commission Regulation 18 or the Arkansas Water and Air Pollution Control Act (Ark. Code Ann. § 8-4-101 *et seq.*) as the origin of and authority for the terms or conditions are enforceable under this Arkansas statute. [40 C.F.R. § 70.6(b)(2)]

2. This permit shall be valid for a period of five (5) years beginning on the date this permit becomes effective and ending five (5) years later. [40 C.F.R. § 70.6(a)(2) and Reg.26.701(B)]

3. The permittee must submit a complete application for permit renewal at least six (6) months before permit expiration. Permit expiration terminates the permittee's right to operate unless the permittee submitted a complete renewal application at least six (6) months before permit expiration. If the permittee submits a complete application, the existing permit will remain in effect until the Division of Environmental Quality takes final action on the renewal application. The Division of Environmental Quality will not necessarily notify the permittee when the permit renewal application is due. [Reg.26.406]

4. Where an applicable requirement of the Clean Air Act, as amended, 42 U.S.C. 7401, *et seq.* (Act) is more stringent than an applicable requirement of regulations promulgated under Title IV of the Act, the permit incorporates both provisions into the permit, and the Director or the Administrator can enforce both provisions. [40 C.F.R. § 70.6(a)(1)(ii) and Reg.26.701(A)(2)]

5. The permittee must maintain the following records of monitoring information as required by this permit.

    a. The date, place as defined in this permit, and time of sampling or measurements;
    b. The date(s) analyses performed;
    c. The company or entity performing the analyses;
    d. The analytical techniques or methods used;
    e. The results of such analyses; and
    f. The operating conditions existing at the time of sampling or measurement.

    [40 C.F.R. § 70.6(a)(3)(ii)(A) and Reg.26.701(C)(2)]

6. The permittee must retain the records of all required monitoring data and support information for at least five (5) years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. [40 C.F.R. § 70.6(a)(3)(ii)(B) and Reg.26.701(C)(2)(b)]

7. The permittee must submit reports of all required monitoring every six (6) months. If the permit establishes no other reporting period, the reporting period shall end on the last day of the month six months after the issuance of the initial Title V permit and every six months thereafter. The report is due on the first day of the second month after the end of the reporting period. The first report due after issuance of the initial Title V permit shall contain six months of data and each report thereafter shall contain 12 months of data. The report shall contain data for all monitoring requirements in effect during the reporting period. If a monitoring requirement is not in effect for the entire reporting period, only those months of data in which the monitoring requirement was in effect are required to be reported. The report must clearly identify all instances of deviations from permit requirements. A responsible official as defined in Reg.26.2 must certify all required reports. The permittee will send the reports electronically using https://eportal.adeq.state.ar.us or mail them to the address below:

   Division of Environmental Quality
   Office of Air Quality
   ATTN: Compliance Inspector Supervisor
   5301 Northshore Drive
   North Little Rock, AR 72118-5317

   [40 C.F.R. § 70.6(a)(3)(iii)(A) and Reg.26.701(C)(3)(a)]

8. The permittee shall report to the Division of Environmental Quality all deviations from permit requirements, including those attributable to upset conditions as defined in the permit.

   a. For all upset conditions (as defined in Reg.19.601), the permittee will make an initial report to the Division of Environmental Quality by the next business day after the discovery of the occurrence. The initial report may be made by telephone and shall include:

      i. The facility name and location;
      ii. The process unit or emission source deviating from the permit limit;
      iii. The permit limit, including the identification of pollutants, from which deviation occurs;
      iv. The date and time the deviation started;
      v. The duration of the deviation;

vi. The emissions during the deviation;
vii. The probable cause of such deviations;
viii. Any corrective actions or preventive measures taken or being taken to prevent such deviations in the future; and
ix. The name of the person submitting the report.

The permittee shall make a full report in writing to the Division of Environmental Quality within five (5) business days of discovery of the occurrence. The report must include, in addition to the information required by the initial report, a schedule of actions taken or planned to eliminate future occurrences and/or to minimize the amount the permit's limits were exceeded and to reduce the length of time the limits were exceeded. The permittee may submit a full report in writing (by facsimile, overnight courier, or other means) by the next business day after discovery of the occurrence, and the report will serve as both the initial report and full report.

b. For all deviations, the permittee shall report such events in semi-annual reporting and annual certifications required in this permit. This includes all upset conditions reported in 8a above. The semi-annual report must include all the information as required by the initial and full reports required in 8a.

[Reg.19.601, Reg.19.602, Reg.26.701(C)(3)(b), and 40 C.F.R. § 70.6(a)(3)(iii)(B)]

9. If any provision of the permit or the application thereof to any person or circumstance is held invalid, such invalidity will not affect other provisions or applications hereof which can be given effect without the invalid provision or application, and to this end, provisions of this Regulation are declared to be separable and severable. [40 C.F.R. § 70.6(a)(5), Reg.26.701(E), and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]

10. The permittee must comply with all conditions of this Part 70 permit. Any permit noncompliance with applicable requirements as defined in Regulation 26 constitutes a violation of the Clean Air Act, as amended, 42 U.S.C. § 7401, *et seq.* and is grounds for enforcement action; for permit termination, revocation and reissuance, for permit modification; or for denial of a permit renewal application. [40 C.F.R. § 70.6(a)(6)(i) and Reg.26.701(F)(1)]

11. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity to maintain compliance with the conditions of this permit. [40 C.F.R. § 70.6(a)(6)(ii) and Reg.26.701(F)(2)]

12. The Division of Environmental Quality may modify, revoke, reopen and reissue the permit or terminate the permit for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. [40 C.F.R. § 70.6(a)(6)(iii) and Reg.26.701(F)(3)]

13. This permit does not convey any property rights of any sort, or any exclusive privilege. [40 C.F.R. § 70.6(a)(6)(iv) and Reg.26.701(F)(4)]

14. The permittee must furnish to the Director, within the time specified by the Director, any information that the Director may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee must also furnish to the Director copies of records required by the permit. For information the permittee claims confidentiality, the Division of Environmental Quality may require the permittee to furnish such records directly to the Director along with a claim of confidentiality. [40 C.F.R. § 70.6(a)(6)(v) and Reg.26.701(F)(5)]

15. The permittee must pay all permit fees in accordance with the procedures established in Regulation 9. [40 C.F.R. § 70.6(a)(7) and Reg.26.701(G)]

16. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes provided for elsewhere in this permit. [40 C.F.R. § 70.6(a)(8) and Reg.26.701(H)]

17. If the permit allows different operating scenarios, the permittee shall, contemporaneously with making a change from one operating scenario to another, record in a log at the permitted facility a record of the operational scenario. [40 C.F.R. § 70.6(a)(9)(i) and Reg.26.701(I)(1)]

18. The Administrator and citizens may enforce under the Act all terms and conditions in this permit, including any provisions designed to limit a source's potential to emit, unless the Division of Environmental Quality specifically designates terms and conditions of the permit as being federally unenforceable under the Act or under any of its applicable requirements. [40 C.F.R. § 70.6(b) and Reg.26.702(A) and (B)]

19. Any document (including reports) required by this permit pursuant to 40 C.F.R. § 70 must contain a certification by a responsible official as defined in Reg.26.2. [40 C.F.R. § 70.6(c)(1) and Reg.26.703(A)]

20. The permittee must allow an authorized representative of the Division of Environmental Quality, upon presentation of credentials, to perform the following: [40 C.F.R. § 70.6(c)(2) and Reg.26.703(B)]

    a. Enter upon the permittee's premises where the permitted source is located or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
    b. Have access to and copy, at reasonable times, any records required under the conditions of this permit;

c. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit; and
d. As authorized by the Act, sample or monitor at reasonable times substances or parameters for assuring compliance with this permit or applicable requirements.

21. The permittee shall submit a compliance certification with the terms and conditions contained in the permit, including emission limitations, standards, or work practices. The permittee must submit the compliance certification annually. If the permit establishes no other reporting period, the reporting period shall end on the last day of the anniversary month of the initial Title V permit. The report is due on the first day of the second month after the end of the reporting period. The permittee must also submit the compliance certification to the Administrator as well as to the Division of Environmental Quality. All compliance certifications required by this permit must include the following: [40 C.F.R. § 70.6(c)(5) and Reg.26.703(E)(3)]

a. The identification of each term or condition of the permit that is the basis of the certification;
b. The compliance status;
c. Whether compliance was continuous or intermittent;
d. The method(s) used for determining the compliance status of the source, currently and over the reporting period established by the monitoring requirements of this permit; and
e. Such other facts as the Division of Environmental Quality may require elsewhere in this permit or by § 114(a)(3) and § 504(b) of the Act.

22. Nothing in this permit will alter or affect the following: [Reg.26.704(C)]

a. The provisions of Section 303 of the Act (emergency orders), including the authority of the Administrator under that section;
b. The liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance;
c. The applicable requirements of the acid rain program, consistent with § 408(a) of the Act; or
d. The ability of EPA to obtain information from a source pursuant to § 114 of the Act.

23. This permit authorizes only those pollutant emitting activities addressed in this permit. [Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]

24. The permittee may request in writing and at least 15 days in advance of the deadline, an extension to any testing, compliance or other dates in this permit. No such extensions are authorized until the permittee receives written Division of Environmental Quality approval. The Division of Environmental Quality may grant such a request, at its discretion in the following circumstances:

a. Such an extension does not violate a federal requirement;
b. The permittee demonstrates the need for the extension; and
c. The permittee documents that all reasonable measures have been taken to meet the current deadline and documents reasons it cannot be met.

[Reg.18.314(A), Reg.19.416(A), Reg.26.1013(A), Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311, and 40 C.F.R. § 52 Subpart E]

25. The permittee may request in writing and at least 30 days in advance, temporary emissions and/or testing that would otherwise exceed an emission rate, throughput requirement, or other limit in this permit. No such activities are authorized until the permittee receives written Division of Environmental Quality approval. Any such emissions shall be included in the facility's total emissions and reported as such. The Division of Environmental Quality may grant such a request, at its discretion under the following conditions:

a. Such a request does not violate a federal requirement;
b. Such a request is temporary in nature;
c. Such a request will not result in a condition of air pollution;
d. The request contains such information necessary for the Division of Environmental Quality to evaluate the request, including but not limited to, quantification of such emissions and the date/time such emission will occur;
e. Such a request will result in increased emissions less than five tons of any individual criteria pollutant, one ton of any single HAP and 2.5 tons of total HAPs; and
f. The permittee maintains records of the dates and results of such temporary emissions/testing.

[Reg.18.314(B), Reg.19.416(B), Reg.26.1013(B), Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311, and 40 C.F.R. § 52 Subpart E]

26. The permittee may request in writing and at least 30 days in advance, an alternative to the specified monitoring in this permit. No such alternatives are authorized until the permittee receives written Division of Environmental Quality approval. The Division of Environmental Quality may grant such a request, at its discretion under the following conditions:

a. The request does not violate a federal requirement;
b. The request provides an equivalent or greater degree of actual monitoring to the current requirements; and
c. Any such request, if approved, is incorporated in the next permit modification application by the permittee.

[Reg.18.314(C), Reg.19.416(C), Reg.26.1013(C), Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311, and 40 C.F.R. § 52 Subpart E]

27. Any credible evidence based on sampling, monitoring, and reporting may be used to determine violations of applicable emission limitations. [Reg.18.1001, Reg.19.701, Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311, and 40 C.F.R. § 52 Subpart E]

APPENDIX A

40 C.F.R. Part 63, Subpart HHHH – *National Emission Standards for Hazardous Air Pollutants for Wet-Formed Fiberglass Mat Production*

Subpart HHHH—National Emission Standards for Hazardous Air Pollutants for Wet-Formed Fiberglass Mat Production

SOURCE: 67 FR 17835, Apr. 11, 2002, unless otherwise noted.

WHAT THIS SUBPART COVERS

§63.2980 What is the purpose of this subpart?

This subpart establishes national emission standards for hazardous air pollutants (NESHAP) for emissions from facilities that produce wet-formed fiberglass mat. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations.

§63.2981 Does this subpart apply to me?

You must comply with this subpart if you meet the criteria in paragraphs (a) and (b) of this section:

(a) You own or operate a drying and curing oven at a wet-formed fiberglass mat production facility.

(b) Your drying and curing oven or the facility at which your drying and curing oven is located is a major source of hazardous air pollutants (HAP). A major source is any stationary source or group of stationary sources located within a contiguous area and under common control that emits or can potentially emit, considering controls, in the aggregate, 9.07 megagrams (10 tons) or more per year of a single HAP or 22.68 megagrams (25 tons) or more per year of any combination of HAP.

§63.2982 What parts of my plant does this subpart cover?

(a) This subpart applies to each new, reconstructed, or existing affected source. The affected source (the portion of your plant covered by this subpart) is each wet-formed fiberglass mat drying and curing oven.

(b) An affected source is a new affected source if you commenced construction of the affected source after May 26, 2000, and you meet the applicability criteria in §63.2981 at start-up.

(c) An affected source is reconstructed if you meet the criteria as defined in §63.2.

(d) An affected source is existing if it is not new or reconstructed.

EMISSION LIMITATIONS

§63.2983 What emission limits must I meet?

(a) You must limit the formaldehyde emissions from each drying and curing oven by either:

(1) Limiting emissions of formaldehyde to 0.03 kilograms or less per megagram (0.05 pounds per ton) of fiberglass mat produced; or

(2) Reducing uncontrolled formaldehyde emissions by 96 percent or more.

(b) [Reserved]

§63.2984 What operating limits must I meet?

(a) You must maintain operating parameters within established limits or ranges specified in your operation, maintenance, and monitoring (OMM) plan described in §63.2987. If there is a deviation of any of the specified parameters from the limit or range specified in the OMM plan, you must address the deviation according to paragraph (b) of this section. You must comply with the operating limits specified in paragraphs (a)(1) through (4) of this section:

(1) You must operate the thermal oxidizer so that the average operating temperature in any 3-hour block period does not fall below the temperature established during your performance test and specified in your OMM plan, except during periods when using a non-HAP binder.

(2) You must not use a resin with a free-formaldehyde content greater than that of the resin used during your performance test and specified in your OMM plan.

(3) You must operate the wet-formed fiberglass mat production process so that the average urea formaldehyde resin solids application rate in any 3-hour block period does not exceed the average application rate achieved during your performance test and specified in your OMM plan.

(4) If you use an add-on control device other than a thermal oxidizer or wish to monitor an alternative parameter and comply with a different operating limit than the limit specified in paragraph (a)(1) of this section, you must obtain approval for the alternative monitoring under §63.8(f). You must include the approved alternative monitoring and operating limits in the OMM plan specified in §63.2987.

(b) When during a period of normal operation, you detect that an operating parameter deviates from the limit or range established in paragraph (a) of this section, you must initiate corrective actions within 1 hour according to the provisions of your OMM plan. The corrective actions must be completed in an expeditious manner as specified in the OMM plan.

(c) You must maintain and inspect control devices according to the procedures specified in the OMM plan.

(d) You must include the operating limits specified in paragraphs (a)(1) through (4) of this section and their allowable ranges or levels in your OMM plan. Your 40 CFR part 70 operating permit for the drying and curing oven must contain a requirement that you develop and operate according to an OMM plan at all times.

(e) If you use a thermal oxidizer or other control device to achieve the emission limits in §63.2983, you must capture and convey the formaldehyde emissions from each drying and curing oven according to the procedures in Chapters 3 and 5 of "Industrial Ventilation: A Manual of Recommended Practice" (23rd Edition) or the appropriate chapters of "Industrial Ventilation: A Manual of Recommended Practice for Design" (27th Edition) (both are incorporated by reference, see §63.14). In addition, you may use an alternate as approved by the Administrator.

[67 FR 17835, Apr. 11, 2002, as amended at 71 FR 20464, Apr. 20, 2006; 84 FR 6692, Feb. 28, 2019]

§63.2985 When do I have to comply with these standards?

(a) Existing drying and curing ovens must be in compliance with this subpart no later than April 11, 2005, except as otherwise specified in this section and §§63.2986, 63.2998, 63.3000, and 63.3004 and Table 2 to this subpart.

(b) Drying and curing ovens constructed or reconstructed after May 26, 2000 and before April 9, 2018 must be in compliance with this subpart at startup or by April 11, 2002, whichever is later, except as otherwise specified in this section and §§63.2986, 63.2998, 63.3000, and 63.3004 and Table 2 to this subpart.

(c) If your facility is an area source that increases its emissions or its potential to emit such that it becomes a major source of HAP, the following apply:

(1) Any portion of the existing facility that is a new affected source or a new reconstructed affected source must be in compliance upon startup.

(2) All other parts of the source must be in compliance with this subpart 1 year after becoming a major source or by April 11, 2005, whichever is later.

(d) Drying and curing ovens constructed or reconstructed after April 6, 2018 must be in compliance with this subpart at startup or by February 28, 2019 whichever is later.

[67 FR 17835, Apr. 11, 2002, as amended at 84 FR 6692, Feb. 28, 2019]

§63.2986 How do I comply with the standards?

(a) You must install, maintain, and operate a thermal oxidizer or other control device or implement a process modification that reduces formaldehyde emissions from each drying and curing oven to the emission limits specified in §63.2983.

(b) You must comply with the operating limits specified in §63.2984. The operating limits prescribe the requirements for demonstrating continuous compliance based on the OMM plan. You must begin complying with the operating limits on the date by which you must complete the initial performance test.

(c) You must conduct a performance test according to §§63.2991, 63.2992, and 63.2993 to demonstrate compliance for each drying and curing oven subject to the emission limits in §63.2983, and to establish or modify the operating limits or ranges for process or control device parameters that will be monitored to demonstrate continuous compliance.

(d) You must install, calibrate, maintain, and operate devices that monitor the parameters specified in your OMM plan at the frequency specified in the plan. All continuous parameter monitoring systems must be installed and operating no later than the applicable compliance date specified in §63.2985.

(e) You must prepare and follow a written OMM plan as specified in §63.2987.

(f) You must comply with the monitoring, recordkeeping, notification, and reporting requirements of this subpart as required by §§63.2996 through 63.3000.

(g) You must comply with the requirements in paragraphs (g)(1) through (3) of this section.

(1) Before August 28, 2019, existing drying and curing ovens and drying and curing ovens constructed or reconstructed after May 26, 2000 and before April 7, 2018 must be in compliance with the emission limits in §63.2983 and the operating limits in §63.2984 at all times, except during periods of startup, shutdown, or malfunction. After August 27, 2019, affected sources must be in compliance with the emission limits in §63.2983 and the operating limits in §63.2984 at all times, including periods of startup, shutdown, or malfunction. Affected sources that commence construction or reconstruction after April 6, 2018, must comply with all requirements of the subpart, no later than February 28, 2019 or upon startup, whichever is later.

(2) Before August 28, 2019, existing drying and curing ovens and drying and curing ovens constructed or reconstructed after May 26, 2000 and before April 9, 2018 must always operate and maintain any affected source, including air pollution control equipment and monitoring equipment, according to the provisions in §63.6(e)(1). After August 27, 2019, for such affected sources, and after February 28, 2019 for affected sources that commence construction or reconstruction after April 6, 2018, at all times, you must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if you are in compliance with the emissions limits required by this subpart. The Administrator will base the determination of whether a source is operating in compliance with operation and maintenance requirements on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

(3) Before August 28, 2019, for each existing source and for each new or reconstructed source for which construction commenced after May 26, 2000 and before April 9, 2018, you must maintain your written startup, shutdown, and malfunction plan according to the provisions in §63.6(e)(3). The startup, shutdown, and malfunction plan must address the startup, shutdown, and corrective actions taken for malfunctioning process and air pollution control equipment. A startup, shutdown, and malfunction plan is not required for such affected sources after August 27, 2019. No startup, shutdown, or malfunction plan is required for any affected source that commences construction or reconstruction after April 6, 2018.

[67 FR 17835, Apr. 11, 2002, as amended at 71 FR 20464, Apr. 20, 2006; 84 FR 6693, Feb. 28, 2019]

OPERATION, MAINTENANCE, AND MONITORING PLAN

§63.2987 What must my operation, maintenance, and monitoring (OMM) plan include?

(a) You must prescribe the monitoring that will be performed to ensure compliance with these emission limitations. Table 1 to this subpart lists the minimum monitoring requirements. Your plan must specify the items listed in paragraphs (a)(1) through (3) of this section:

(1) Each process and control device to be monitored, the type of monitoring device that will be used, and the operating parameters that will be monitored.

(2) A monitoring schedule that specifies the frequency that the parameter values will be determined and recorded.

(3) The operating limits or ranges for each parameter that represent continuous compliance with the emission limits in §63.2983. Operating limits and ranges must be based on values of the monitored parameters recorded during performance tests.

(b) You must establish routine and long-term maintenance and inspection schedules for each control device. You must incorporate in the schedules the control device manufacturer's recommendations for maintenance and inspections or equivalent procedures. If you use a thermal oxidizer, the maintenance schedule must include procedures for annual or more frequent inspection of the thermal oxidizer to ensure that the structural and design integrity of the combustion chamber is maintained. At a minimum, you must meet the requirements of paragraphs (b)(1) through (10) of this section:

(1) Inspect all burners, pilot assemblies, and pilot sensing devices for proper operation. Clean pilot sensor if necessary.

(2) Ensure proper adjustment of combustion air and adjust if necessary.

(3) Inspect, when possible, all internal structures (such as baffles) to ensure structural integrity per the design specifications.

(4) Inspect dampers, fans, and blowers for proper operation.

(5) Inspect motors for proper operation.

(6) Inspect, when possible, combustion chamber refractory lining. Clean and repair or replace lining if necessary.

(7) Inspect the thermal oxidizer shell for proper sealing, corrosion, and hot spots.

(8) For the burn cycle that follows the inspection, document that the thermal oxidizer is operating properly and make any necessary adjustments.

(9) Generally observe whether the equipment is maintained in good operating condition.

(10) Complete all necessary repairs as soon as practicable.

(c) You must establish procedures for responding to operating parameter deviations. At a minimum, the procedures must include the information in paragraphs (c)(1) through (3) of this section.

(1) Procedures for determining the cause of the operating parameter deviation.

(2) Actions for correcting the deviation and returning the operating parameters to the allowable ranges or limits.

(3) Procedures for recording the date and time that the deviation began and ended, and the times corrective actions were initiated and completed.

(d) Your plan must specify the recordkeeping procedures to document compliance with the emissions and operating limits. Table 1 to this subpart establishes the minimum recordkeeping requirements.

[67 FR 17835, Apr. 11, 2002, as amended at 84 FR 6693, Feb. 28, 2019]

§63.2988 [Reserved]

§63.2989 How do I change my OMM plan?

Changes to the operating limits or ranges in your OMM plan require a new performance test.

(a) To revise the ranges or levels established for your operating limits in §63.2984, you must meet the requirements in paragraphs (a)(1) and (2) of this section:

(1) Submit a notification of performance test to the Administrator as specified in §63.7(b) to revise your operating ranges or limits.

(2) After completing the performance test to demonstrate that compliance with the emissions limits can be achieved at the revised levels of the operating limits, you must submit the performance test results and the revised operating limits as part of the notification of compliance status required under §63.9(h).

(b) If you are revising the inspection and maintenance procedures in your plan that are specified in §63.2987(b), you do not need to conduct a new performance test.

(c) If you plan to operate your process or control device under alternative operating conditions and do not wish to revise your OMM plan when you change operating conditions, you can perform a separate compliance test to establish operating limits for each condition. You can then include the operating limits for each condition in your OMM plan. After completing the performance tests, you must record the date and time when you change operations from one condition to another, the condition under which you are operating, and the operating limits that apply under that condition. If you can perform a single performance test that establishes the most stringent operating limits that cover all alternative operating conditions, then you do not need to comply with the provisions of this paragraph.

[67 FR 17835, Apr. 11, 2002, as amended at 84 FR 6693, Feb. 28, 2019]

§63.2990 Can I conduct short-term experimental production runs that cause parameters to deviate from operating limits?

With the approval of the Administrator, you may conduct short-term experimental production runs during which your operating parameters deviate from the operating limits. Experimental runs may include, but are not limited to, runs using resin with a higher free-formaldehyde content than specified in the OMM plan, or using experimental pollution prevention techniques. To conduct a short-term experimental production run, you must complete the requirements in paragraphs (a) and (b) of this section.

(a) Prepare an application to the Administrator for approval to conduct the experimental production runs. Your application must include the items listed in paragraphs (a)(1) through (6) of this section.

(1) The purpose of the experimental production run.

(2) Identification of the affected line.

(3) An explanation of how the operating parameters will deviate from the previously approved ranges and limits.

(4) The duration of the experimental production run.

(5) The date and time of the experimental production run.

(6) A description of any emission testing to be performed during the experimental production run.

(b) Submit the application to the Administrator for approval at least 30 days before you conduct the experimental production run.

(c) If you conduct such experimental production runs without first receiving approval from the Administrator, then you must conduct a performance test under those same experimental production run conditions to show that you were in compliance with the formaldehyde emission limits in §63.2983.

TESTING AND INITIAL COMPLIANCE REQUIREMENTS

§63.2991 When must I conduct performance tests?

Except for drying and curing ovens subject to a federally enforceable permit that requires the exclusive use of non-HAP binders, you must conduct a performance test for each drying and curing oven subject to this subpart according to the provisions in paragraphs (a) through (c) of this section:

(a) *Initially.* You must conduct a performance test to demonstrate initial compliance and to establish operating parameter limits and ranges to be used to demonstrate continuous compliance with the emission standards no later than 180 days after the applicable compliance date specified in §63.2985.

(b) *Every 5 years.* You must conduct a performance test every 5 years as part of renewing your 40 CFR part 70 operating permit.

(c) *To change your OMM plan.* You must conduct a performance test according to the requirements specified in §63.2992 to change the limit or range for any operating limit specified in your OMM plan established during a previous compliance test.

[67 FR 17835, Apr. 11, 2002, as amended at 84 FR 6693, Feb. 28, 2019]

§63.2992 How do I conduct a performance test?

(a) You must verify the performance of monitoring equipment as specified in §63.2994 before performing the test.

(b) You must conduct the performance test according to the requirements in §63.7(a) through (d), (e)(2) through (4), and (f) through (h).

(c) You must conduct the performance test under the conditions specified in paragraphs (c)(1) and (2) of this section.

(1) The resin must have the highest specified free-formaldehyde content that will be used.

(2) You must operate at the maximum feasible urea-formaldehyde resin solids application rate (pounds urea-formaldehyde resin solids applied per hour) that will be used.

(d) During the performance test, you must monitor and record the operating parameters that you will use to demonstrate continuous compliance after the test. These parameters are listed in Table 1 to this subpart.

(e) You must conduct performance tests under conditions that are representative of the performance of the affected source. Representative conditions exclude periods of startup and shutdown. You may not conduct performance tests during periods of malfunction. You must record the process information that is necessary to document operating conditions during the test and record an explanation to support that such conditions represent normal operation. Upon request, you must make available to the Administrator such records as may be necessary to determine the conditions of performance tests.

(f) You must conduct three separate test runs for each performance test as specified in §63.7(e)(3), and each test run must last at least 1 hour.

[67 FR 17835, Apr. 11, 2002, as amended at 84 FR 6693, Feb. 28, 2019]

§63.2993 What test methods must I use in conducting performance tests?

(a) Use EPA Method 1 (40 CFR part 60, appendix A-1) for selecting the sampling port location and the number of sampling ports.

(b) Use EPA Method 2 (40 CFR part 60, appendix A-1) for measuring the volumetric flow rate of the stack gas.

(c) Use EPA Method 3 or 3A (40 CFR part 60, appendix A-2) for measuring oxygen and carbon dioxide concentrations needed to correct formaldehyde concentration measurements to a standard basis.

(d) Use EPA Method 4 (40 CFR part 60, appendix A-3) for measuring the moisture content of the stack gas.

(e) Use EPA Method 316, 318, or 320 (40 CFR part 63, appendix A) for measuring the concentration of formaldehyde.

(f) Use the method contained in appendix A to this subpart or the resin purchase specification and the vendor specification sheet for each resin lot for determining the free-formaldehyde content in the urea-formaldehyde resin.

(g) Use the method in appendix B to this subpart for determining product loss-on-ignition.

[84 FR 6694, Feb. 28, 2019]

§63.2994 How do I verify the performance of monitoring equipment?

(a) Before conducting the performance test, you must take the steps listed in paragraphs (a)(1) through (3) of this section:

(1) Install and calibrate all process equipment, control devices, and monitoring equipment.

(2) Develop and implement a continuous parameter monitoring system (CPMS) quality control program that includes written procedures for CPMS according to §63.8(d)(1) and (2). You must keep these written procedures on record for the life of the affected source or until the affected source is no longer subject to the provisions of this subpart, to be made available for inspection, upon request, by the Administrator. If you revise the performance evaluation plan, you must keep previous (*i.e.,* superseded) versions of the performance evaluation plan on record to be made available for inspection, upon request, by the Administrator, for a period of 5 years after each revision to the plan. You should include the program of corrective action in the plan required under §63.8(d)(2).

(3) Conduct a performance evaluation of the CPMS according to §63.8(e) which specifies the general requirements and requirements for notifications, the site-specific performance evaluation plan, conduct of the performance evaluation, and reporting of performance evaluation results.

(b) If you use a thermal oxidizer, the temperature monitoring device must meet the performance and equipment specifications listed in paragraphs (b)(1) through (3) of this section:

(1) The temperature monitoring device must be installed either at the exit of the combustion zone of each thermal oxidizer, or at the location specified by the manufacturer. The temperature monitoring device must also be installed in a location before any heat recovery or heat exchange equipment, and it must remain in the same location for both the performance test and the continuous monitoring of temperature.

(2) The recorder response range must include zero and 1.5 times the average temperature required in §63.2984(a)(1).

(3) The measurement method or reference method for calibration must be a National Institute of Standards and Technology calibrated reference thermocouple-potentiometer system or an alternate reference subject to the approval of the Administrator.

[67 FR 17835, Apr. 11, 2002, as amended at 84 FR 6694, Feb. 28, 2019]

§63.2995 What equations must I use to determine compliance?

(a) *Percent reduction for formaldehyde.* To determine compliance with the percent reduction formaldehyde emission standard, use equation 1 of this section as follows:

$$E_f = \frac{M_i - M_o}{M_i} \times 100 \qquad (Eq.\ 1)$$

Where:

E_f = Formaldehyde control efficiency, percent.

M_i = Mass flow rate of formaldehyde entering the control device, kilograms (pounds) per hour.

M_o = Mass flow rate of formaldehyde exiting the control device, kilograms (pounds) per hour.

(b) *Formaldehyde mass emissions rate.* To determine compliance with the kilogram per megagram (pound per ton) formaldehyde emission standard, use equation 2 of this section as follows:

$$E = \frac{M}{P} \qquad (Eq.\ 2)$$

Where:

E = Formaldehyde mass emissions rate, kilograms (pounds) of formaldehyde per megagram (ton) of fiberglass mat produced.

M = Formaldehyde mass emissions rate, kilograms (pounds) per hour.

P = The wet-formed fiberglass mat production rate during the emissions sampling period, including any material trimmed from the final product, megagrams (tons) per hour.

(c) *Urea-formaldehyde (UF) resin solids application rate.* To determine the UF resin solids application rate, use equation 3 of this section as follows:

$$\frac{UF\ \text{Solids}}{Hour} = LOI \times UFL \times MW \times SQ \qquad (Eq.\ 3)$$

Where:

UF solids/hour = UF resin solids application rate (pounds per hour).

LOI = loss on ignition (weight faction), or pound of organic binder per pound of mat.

UFL = UF-to-latex ratio in the binder (mass fraction of UF resin solids in total combined resin solids for UF and latex), or pound of UF solids per pound of total resin solids (UF and latex).

MW = weight of the final mat per square (pounds per roofing square).

SQ = roofing squares produced per hour.

MONITORING REQUIREMENTS

§63.2996 What must I monitor?

(a) You must monitor the parameters listed in Table 1 to this subpart and any other parameters specified in your OMM plan. You must monitor the parameters, at a minimum, at the corresponding frequencies listed in Table 1 to this subpart, except as specified in paragraph (b) of this section.

(b) During periods when using a non-HAP binder, you are not required to monitor the parameters in Table 1 to this subpart.

[84 FR 6694, Feb. 28, 2019]

§63.2997 What are the requirements for monitoring devices?

(a) If you control formaldehyde emissions using a thermal oxidizer, you must meet the requirements in paragraphs (a)(1) and (2) of this section:

(1) Install, calibrate, maintain, and operate a device to monitor and record continuously the thermal oxidizer temperature at the exit of the combustion zone before any substantial heat exchange occurs or at the location consistent with the manufacturer's recommendations.

(2) Continuously monitor the thermal oxidizer temperature and determine and record the average temperature in 15-minute and 3-hour block averages. You may determine the average temperature more frequently than every 15 minutes and every 3 hours, but not less frequently.

(b) If you use process modifications or a control device other than a thermal oxidizer to control formaldehyde emissions, you must install, calibrate, maintain, and operate devices to monitor the parameters established in your OMM plan at the frequency established in the plan.

[67 FR 17835, Apr. 11, 2002, as amended at 84 FR 6694, Feb. 28, 2019]

NOTIFICATIONS, REPORTS, AND RECORDS

§63.2998 What records must I maintain?

You must maintain records according to the procedures of §63.10. You must maintain the records listed in paragraphs (a) through (i) of this section.

(a) All records required by §63.10, where applicable. Table 2 of this subpart presents the applicable requirements of the general provisions.

(b) The OMM plan.

(c) During periods when the binder formulation being applied contains HAP, records of values of monitored parameters listed in Table 1 to this subpart to show continuous compliance with each operating limit specified in Table 1 to this subpart. If you do not monitor the parameters in Table 1 to this subpart during periods when using non-HAP binder, you must record the dates and times that production of mat using non-HAP binder began and ended.

(d) Records of maintenance and inspections performed on the control devices.

(e) Before August 28, 2019, for existing drying and curing ovens and drying and curing ovens constructed or reconstructed after May 26, 2000 and before April 7, 2018, if an operating parameter deviation occurs, you must record:

(1) The date, time, and duration of the operating parameter deviation;

(2) A brief description of the cause of the operating parameter deviation;

(3) The dates and times at which corrective actions were initiated and completed;

(4) A brief description of the corrective actions taken to return the parameter to the limit or to within the range specified in the OMM plan; and

(5) A record of whether the deviation occurred during a period of startup, shutdown, or malfunction.

(f) Before August 28, 2019, for existing drying and curing ovens and drying and curing ovens constructed or reconstructed after May 26, 2000 and before April 7, 2018, keep all records specified in §63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction. Records specified in §63.6(e)(3)(iii) through (v) are not required to be kept after August 27, 2019 for existing or new drying and curing ovens.

(g) After February 28, 2019 for affected sources that commence construction or reconstruction after April 6, 2018, and after August 27, 2019 for all other affected sources, in the event that an affected source fails to meet an applicable standard, including deviations from an emission limit in §63.2983 or an operating limit in §63.2984, you must record the number of failures and, for each failure, you must:

(1) Record the date, time, and duration of the failure;

(2) Describe the cause of the failure;

(3) Record and retain a list of the affected sources or equipment, an estimate of the quantity of each regulated pollutant emitted over any emission limit, and a description of the method used to estimate the emissions; and

(4) Record actions taken to minimize emissions in accordance with §63.2986(g)(2) and any corrective actions taken to return the affected unit to its normal or usual manner of operation and/or to return the

operating parameter to the limit or to within the range specified in the OMM plan, and the dates and times at which corrective actions were initiated and completed.

(h) If you operate your process or control device under alternative operating condition and have established operating limits for each condition as specified in §63.2989(c), then you must keep records of the date and time you changed operations from one condition to another, the condition under which you are operating, and the applicable operating limits for that condition.

(i) Records showing how the maximum residence time was derived.

[67 FR 17835, Apr. 11, 2002, as amended at 84 FR 6694, Feb. 28, 2019]

§63.2999 In what form and for how long must I maintain records?

(a) You must maintain each record required by this subpart for 5 years. You must maintain the most recent 2 years of records at the facility. The remaining 3 years of records may be retained offsite.

(b) Your records must be readily available and in a form so they can be easily inspected and reviewed. You can keep the records on paper or an alternative medium, such as microfilm, computer, computer disks, compact disk, digital versatile disk, flash drive, other commonly used electronic storage medium, magnetic tape, or on microfiche.

(c) You may maintain any records that you submitted electronically via the EPA's Compliance and Emissions Data Reporting Interface (CEDRI) in electronic format. This ability to maintain electronic copies does not affect the requirement for facilities to make records, data, and reports available upon request to a delegated air agency or the EPA as part of an onsite compliance evaluation.

[67 FR 17835, Apr. 11, 2002, as amended at 84 FR 6695, Feb. 28, 2019]

§63.3000 What notifications and reports must I submit?

(a) You must submit all notifications and reports required by the applicable general provisions and this section. Table 2 of this subpart presents the applicable requirements of the general provisions.

(b) *Notification of compliance status.* You must submit the notification of compliance status, including the performance test results, the operating limits or ranges as determined during the performance test, and other information specified in §63.9(h), before the close of business on the 60th calendar day after you complete the performance test according to §63.10(d)(2).

(c) *Semiannual compliance reports.* You must submit semiannual compliance reports according to the requirements of paragraphs (c)(1) through (6) of this section.

(1) *Dates for submitting reports.* Unless the Administrator has agreed to a different schedule for submitting reports under §63.10(a), you must deliver or postmark each semiannual compliance report no later than 30 days following the end of each semiannual reporting period. The first semiannual reporting period begins on the compliance date for your affected source and ends on June 30 or December 31, whichever date immediately follows your compliance date. Each subsequent semiannual reporting period for which you must

submit a semiannual compliance report begins on July 1 or January 1 and ends 6 calendar months later. Before March 1, 2019, as required by §63.10(e)(3), you must begin submitting quarterly compliance reports if you deviate from the emission limits in §63.2983 or the operating limits in §63.2984. After February 28, 2019, you are not required to submit quarterly compliance reports. If you deviate from the emission limits in §63.2983 or the operating limits in §63.2984 in the quarter prior to February 28, 2019, you must include this information in the report for the first full semiannual reporting period following February 28, 2019.

(2) *Inclusion with title V report.* For each affected source that is subject to permitting regulations pursuant to 40 CFR part 70 or 71, and for which the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 71.6 (a)(3)(iii)(A), you may submit the first and subsequent compliance reports according to the dates the permitting authority has established instead of according to the dates in paragraph (c)(1) of this section.

(3) *Contents of reports.* The semiannual compliance report must contain the information in paragraphs (c)(3)(i) through (vi) of this section:

(i) Company name and address.

(ii) Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.

(iii) Date of report and beginning and ending dates of the reporting period.

(iv) A summary of the total duration of continuous parameter monitoring system downtime during the semiannual reporting period and the total duration of continuous parameter monitoring system downtime as a percent of the total source operating time during that semiannual reporting period.

(v) The date of the latest continuous parameter monitoring system certification or audit.

(vi) A description of any changes in the wet-formed fiberglass mat manufacturing process, continuous parameter monitoring system, or add-on control device since the last semiannual reporting period.

(4) *No deviations.* If there were no instances where an affected source failed to meet an applicable standard, including no deviations from the emission limit in §63.2983 or the operating limits in §63.2984, the semiannual compliance report must include a statement to that effect. If there were no periods during which the continuous parameter monitoring systems were out-of-control as specified in §63.8(c)(7), the semiannual compliance report must include a statement to that effect.

(5) *Deviations.* Before August 28, 2019, for existing drying and curing ovens and drying and curing ovens constructed or reconstructed after May 26, 2000 and before April 7, 2018, if there was a deviation from the emission limit in §63.2983 or an operating limit in §63.2984, the semiannual compliance report must contain the information in paragraphs (c)(5)(i) through (ix) of this section:

(i) The date and time that each malfunction started and stopped.

(ii) The date and time that each continuous parameter monitoring system was inoperative, except for zero (low-level) and high-level checks.

(iii) The date, time, and duration that each continuous parameter monitoring system was out-of-control, including the information in §63.8(c)(8).

(iv) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of startup, shutdown, or malfunction or during another period.

(v) The date and time that corrective actions were taken, a description of the cause of the deviation, and a description of the corrective actions taken.

(vi) A summary of the total duration of each deviation during the semiannual reporting period and the total duration as a percent of the total source operating time during that semiannual reporting period.

(vii) A breakdown of the total duration of the deviations during the semiannual reporting period into those that were due to startup, shutdown, control equipment problems, process problems, other known causes, and other unknown causes.

(viii) A brief description of the associated process units.

(ix) A brief description of the associated continuous parameter monitoring system.

(6) *Deviations.* For affected sources that commence construction or reconstruction after April 6, 2018, after February 28, 2019, and after August 27, 2019 for all other affected sources, if there was an instance where an affected source failed to meet an applicable standard, including a deviation from the emission limit in §63.2983 or an operating limit in §63.2984, the semiannual compliance report must record the number of failures and contain the information in paragraphs (c)(6)(i) through (ix) of this section:

(i) The date, time, and duration of each failure.

(ii) The date and time that each continuous parameter monitoring system was inoperative, except for zero (low-level) and high-level checks.

(iii) The date, time, and duration that each continuous parameter monitoring system was out-of-control, including the information in §63.8(c)(8).

(iv) A list of the affected sources or equipment, an estimate of the quantity of each regulated pollutant emitted over any emission limit, and a description of the method used to estimate the emissions.

(v) The date and time that corrective actions were taken, a description of the cause of the failure (including unknown cause, if applicable), and a description of the corrective actions taken.

(vi) A summary of the total duration of each failure during the semiannual reporting period and the total duration as a percent of the total source operating time during that semiannual reporting period.

(vii) A breakdown of the total duration of the failures during the semiannual reporting period into those that were due to control equipment problems, process problems, other known causes, and other unknown causes.

(viii) A brief description of the associated process units.

(ix) A brief description of the associated continuous parameter monitoring system.

(d) *Startup, shutdown, malfunction reports.* Before August 28, 2019, for existing drying and curing ovens and drying and curing ovens constructed or reconstructed after May 26, 2000 and before April 7, 2018, if you have a startup, shutdown, or malfunction during the semiannual reporting period, you must submit the reports

specified §63.10(d)(5). No startup, shutdown, or malfunction plan is required for any affected source that commences construction or reconstruction after April 6, 2018.

(e) *Performance test results.* You must submit results of each performance test (as defined in §63.2) required by this subpart no later than 60 days after completing the test as specified in §63.10(d)(2). You must include the values measured during the performance test for the parameters listed in Table 1 of this subpart and the operating limits or ranges that you will include in your OMM plan. For the thermal oxidizer temperature, you must include 15-minute averages and the average for the three 1-hour test runs. For affected sources that commence construction or reconstruction after April 6, 2018, beginning February 28, 2019, and beginning no later than August 27, 2019 for all other affected sources, you must submit the results following the procedures specified in paragraphs (e)(1) through (3) of this section.

(1) For data collected using test methods supported by the EPA's Electronic Reporting Tool (ERT) as listed on the EPA's ERT website (*https://www.epa.gov/electronic-reporting-air-emissions/electronic-reporting-tool-ert*) at the time of the test, you must submit the results of the performance test to the EPA via CEDRI (CEDRI can be accessed through the EPA's Central Data Exchange (CDX) (*https://cdx.epa.gov/*)). You must submit performance test data in a file format generated through the use of the EPA's ERT or an alternate electronic file format consistent with the extensible markup language (XML) schema listed on the EPA's ERT website.

(2) For data collected using test methods that are not supported by the EPA's ERT as listed on the EPA's ERT website at the time of the test, you must submit the results of the performance test to the Administrator at the appropriate address listed in §63.13, unless the Administrator agrees to or specifies an alternate reporting method.

(3) If you claim that some of the performance test information you are submitting under paragraph (e)(1) is confidential business information (CBI), you must submit a complete file generated through the use of the EPA's ERT or an alternate electronic file consistent with the XML schema listed on the EPA's ERT website, including information claimed to be CBI, on a compact disk, flash drive or other commonly used electronic storage medium to the EPA. You must clearly mark the electronic medium as CBI and mail to U.S. EPA/OAQPS/CORE CBI Office, Attention: Group Leader, Measurement Policy Group, Mail Drop C404-02, 4930 Old Page Rd., Durham, NC 27703. You must submit the same ERT or alternate file with the CBI omitted to the EPA via the EPA's CDX as described in paragraph (e)(1) of this section.

(f) *Claims of EPA system outage.* If you are required to electronically submit a report through the CEDRI in the EPA's CDX, you may assert a claim of EPA outage for failure to timely comply with the reporting requirement. To assert a claim of EPA system outage, you must meet the requirements outlined in paragraphs (f)(1) through (7) of this section.

(1) You must have been or will be precluded from accessing CEDRI and submitting a required test report within the time prescribed due to an outage of either the EPA's CEDRI or CDX Systems.

(2) The outage must have occurred within the period of time beginning five business days prior to the date that the submission is due.

(3) The outage may be planned or unplanned.

(4) You must submit notification to the Administrator in writing as soon as possible following the date you first knew, or through due diligence should have known, that the event may cause or has caused a delay in reporting.

(5) You must provide to the Administrator a written description identifying:

(i) The date(s) and time(s) when CDX or CEDRI was accessed and the system was unavailable;

(ii) A rationale for attributing the delay in reporting beyond the regulatory deadline to EPA system outage;

(iii) Measures taken or to be taken to minimize the delay in reporting; and

(iv) The date by which you propose to report, or if you have already met the reporting requirement at the time of the notification, the date you reported.

(6) The decision to accept the claim of EPA system outage and allow an extension to the reporting deadline is solely within the discretion of the Administrator.

(7) In any circumstance, the report must be submitted electronically as soon as possible after the outage is resolved.

(g) *Claims of force majeure.* If you are required to electronically submit a report through CEDRI in the EPA's CDX, you may assert a claim of force majeure for failure to timely comply with the reporting requirement. To assert a claim of force majeure, you must meet the requirements outlined in paragraphs (g)(1) through (5) of this section.

(1) You may submit a claim if a force majeure event is about to occur, occurs, or has occurred or there are lingering effects from such an event within the period of time beginning five business days prior to the date the submission is due. For the purposes of this section, a force majeure event is defined as an event that will be or has been caused by circumstances beyond the control of the affected facility, its contractors, or any entity controlled by the affected facility that prevents you from complying with the requirements to submit a report electronically within the time period prescribed. Examples of such events are acts of nature (e.g., hurricanes, earthquakes, or floods), acts of war or terrorism, or equipment failure or safety hazard beyond the control of the affected facility (e.g., large scale power outage).

(2) You must submit notification to the Administrator in writing as soon as possible following the date you first knew, or through due diligence should have known, that the event may cause or has caused a delay in reporting.

(3) You must provide to the Administrator:

(i) A written description of the force majeure event;

(ii) A rationale for attributing the delay in reporting beyond the regulatory deadline to the force majeure event;

(iii) Measures taken or to be taken to minimize the delay in reporting; and

(iv) The date by which you propose to report, or if you have already met the reporting requirement at the time of the notification, the date you reported.

(4) The decision to accept the claim of force majeure and allow an extension to the reporting deadline is solely within the discretion of the Administrator.

(5) In any circumstance, the reporting must occur as soon as possible after the force majeure event occurs.

[67 FR 17835, Apr. 11, 2002, as amended at 84 FR 6695, Feb. 28, 2019]

OTHER REQUIREMENTS AND INFORMATION

§63.3001 What sections of the general provisions apply to me?

You must comply with the requirements of the general provisions of 40 CFR part 63, subpart A, as specified in Table 2 of this subpart.

[84 FR 6696, Feb. 28, 2019]

§63.3002 Who implements and enforces this subpart?

(a) This subpart can be implemented and enforced by the U.S. EPA or a delegated authority, such as your State, local, or tribal agency. If the Administrator has delegated authority to your State, local, or tribal agency, then that agency is the primary enforcement authority. If the Administrator has not delegated authority to your State, only EPA enforces this subpart. You should contact your U.S. EPA Regional Office to find out if implementation and enforcement of this subpart is delegated to your State, local, or tribal agency.

(b) In delegating implementation and enforcement authority of this subpart to a State, local, or tribal agency under section 40 CFR part 63, subpart E, the authorities contained in paragraphs (b)(1) through (4) of this section are retained by the Administrator of U.S. EPA and are not transferred to the State, local, or tribal agency.

(1) The authority under §63.6(g) to approve alternatives to the emission limits in §63.2983 and operating limits in §63.2984 is not delegated.

(2) The authority under §63.7(e)(2)(ii) and (f) to approve of major alternatives (as defined in §63.90) to the test methods in §63.2993 is not delegated.

(3) The authority under §63.8(f) to approve major alternatives (as defined in §63.90) to the monitoring requirements in §§63.2996 and 63.2997 is not delegated.

(4) The authority under §63.10(f) to approve major alternatives (as defined in §63.90) to recordkeeping, notification, and reporting requirements in §§63.2998 through 63.3000 is not delegated.

§63.3003 [Reserved]

§63.3004 What definitions apply to this subpart?

Terms used in this subpart are defined the Clean Air Act, in §63.2, and in this section as follows:

Administrator means the Administrator of the United States Environmental Protection Agency or his or her authorized representative (e.g., a State that has been delegated the authority to implement the provisions of this part).

Deviation means:

(1) Before August 28, 2019, any instance in which an affected source subject to this subpart, or an owner or operator of such a source:

(i) Fails to meet any requirement or obligation established by this subpart, including, but not limited to, any emission limit, operating limit, or work practice standard;

(ii) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any affected source required to obtain such a permit; or

(iii) Fails to meet any emission limit, or operating limit, or work practice standard in this subpart during startup, shutdown, or malfunction, regardless of whether or not such failure is permitted by this subpart.

(2) After February 28, 2019 for affected sources that commence construction or reconstruction after April 6, 2018, and after August 27, 2019 for all other affected sources, any instance in which an affected source subject to this subpart, or an owner or operator of such a source:

(i) Fails to meet any requirement or obligation established by this subpart, including, but not limited to, any emission limit, operating limit, or work practice standard; or

(ii) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any affected source required to obtain such a permit.

Drying and curing oven means the process section that evaporates excess moisture from a fiberglass mat and cures the resin that binds the fibers.

Emission limitation means an emission limit, operating limit, or work practice standard.

Fiberglass mat production rate means the weight of finished fiberglass mat produced per hour of production including any trim removed after the binder is applied and before final packaging.

Loss-on-ignition means the percentage decrease in weight of fiberglass mat measured before and after it has been ignited to burn off the applied binder. The loss-on-ignition is used to monitor the weight percent of binder in fiberglass mat.

Maximum residence time means the longest time, during normal operation and excluding periods of ramping up to speed during startup, that a particular point on the fiberglass mat remains in the drying and curing oven. It is determined for each line by the equation:

$T = L/S$

Where:

T is the residence time, in seconds;

L is the length of the drying and curing oven, in feet; and

S is the slowest line speed normally operated on the line, excluding periods of ramping up to speed during startup, in feet per second.

Non-HAP binder means a binder formulation that does not contain any substance that is required to be listed in Section 3 of a safety data sheet (SDS) pursuant to 29 CFR 1910.1200(g) and that is a HAP as defined in section 112(b) of the Clean Air Act. In designating a non-HAP binder under this subpart, you may not rely on the SDS for a binder where the manufacturer has withheld the specific chemical identity, including the chemical name, other specific identification of a hazardous chemical, or the exact percentage (concentration) of the substance in a mixture from Section 3 of the SDS. You may not withhold this information when making the case that the binder is a non-HAP binder for the purposes of §63.2996.

Nonwoven wet-formed fiberglass mat manufacturing means the production of a fiberglass mat by bonding glass fibers to each other using a resin solution. Nonwoven wet-formed fiberglass mat manufacturing is also referred to as wet-formed fiberglass mat manufacturing.

Roofing square means the amount of finished product needed to cover an area 10 feet by 10 feet (100 square feet) of finished roof.

Shutdown after February 28, 2019 for affected sources that commence construction or reconstruction after April 6, 2018, and after August 27, 2019 for all other affected sources, means the cessation of operation of the drying and curing of any binder-infused fiberglass mat for any purpose. Shutdown ends when the maximum residence time has elapsed after binder-infused fiberglass mat ceases to enter the drying and curing oven.

Startup after February 28, 2019 for affected sources that commence construction or reconstruction after April 6, 2018, and after August 27, 2019 for all other affected sources, means the setting in operation of the drying and curing of binder-infused fiberglass mat for any purpose. Startup begins when binder-infused fiberglass mat enters the oven to be dried and cured for the first time or after a shutdown event.

Thermal oxidizer means an air pollution control device that uses controlled flame combustion inside a combustion chamber to convert combustible materials to noncombustible gases.

Urea-formaldehyde content in binder formulation means the mass-based percent of urea-formaldehyde resin in the total binder mix as it is applied to the glass fibers to form the mat.

[67 FR 17835, Apr. 11, 2002, as amended at 84 FR 6696, Feb. 28, 2019]

§§63.3005-63.3079 [Reserved]

Table 1 to Subpart HHHH of Part 63—Minimum Requirements for Monitoring and Recordkeeping

As stated in §63.2998(c), you must comply with the minimum requirements for monitoring and recordkeeping in the following table:

You must monitor these parameters:	At this frequency:	And record for the monitored parameter:

1. Thermal oxidizer temperature[14]	Continuously	15-minute and 3-hour block averages.
2. Other process or control device parameters specified in your OMM plan[24]	As specified in your OMM plan	As specified in your OMM plan.
3. Urea-formaldehyde resin solids application rate[4]	On each operating day, calculate the average lb/h application rate for each product manufactured during that day	The average lb/h value for each product manufactured during the day.
4. Resin free-formaldehyde content[4]	For each lot of resin purchased	The value for each lot used during the operating day.
5. Loss-on-ignition[34]	Measured at least once per day, for each product manufactured during that day	The value for each product manufactured during the operating day.
6. UF-to-latex ratio in the binder[34]	For each batch of binder prepared the operating day	The value for each batch of binder prepared during the operating day.
7. Weight of the final mat product per square (lb/roofing square)[34]	Each product manufactured during the operating day	The value for each product manufactured during the operating day.
8. Average nonwoven wet-formed fiberglass mat production rate (roofing square/h)[34]	For each product manufactured during the operating day	The average value for each product manufactured during operating day.

[1]Required if a thermal oxidizer is used to control formaldehyde emissions.

[2]Required if process modifications or a control device other than a thermal oxidizer is used to control formaldehyde emissions.

[3]These parameters must be monitored and values recorded, but no operating limits apply.

[4]You are not required to monitor or record these parameters during periods when using a non-HAP binder. If you do not monitor these parameters during periods when using a non-HAP binder, you must record the dates and times that production of mat using the non-HAP binder began and ended.

[84 FR 6697, Feb. 28, 2019]

Table 2 to Subpart HHHH of Part 63—Applicability of General Provisions (40 CFR Part 63, Subpart A) to Subpart HHHH

As stated in §63.3001, you must comply with the applicable General Provisions requirements according to the following table:

Citation	Requirement	Applies to subpart HHHH	Explanation
§63.1(a)(1)-(4)	General Applicability	Yes.	

§63.1(a)(5)		No	[Reserved].
§63.1(a)(6)-(8)		Yes.	
§63.1(a)(9)		No	[Reserved].
§63.1(a)(10)-(14)		Yes.	
§63.1(b)	Initial Applicability Determination	Yes.	
§63.1(c)(1)	Applicability After Standard Established	Yes.	
§63.1(c)(2)		Yes	Some plants may be area sources.
§63.1(c)(3)		No	[Reserved].
§63.1(c)(4)-(5)		Yes.	
§63.1(d)		No	[Reserved].
§63.1(e)	Applicability of Permit Program	Yes.	
§63.2	Definitions	Yes	Additional definitions in §63.3004.
§63.3	Units and Abbreviations	Yes.	
§63.4(a)(1)-(3)	Prohibited Activities	Yes.	
§63.4(a)(4)		No	[Reserved].
§63.4(a)(5)		Yes.	
§63.4(b)-(c)	Circumvention/Severability	Yes.	
§63.5(a)	Construction/Reconstruction	Yes.	
§63.5(b)(1)	Existing/Constructed/Reconstruction	Yes.	
§63.5(b)(2)		No	[Reserved].
§63.5(b)(3)-(6)		Yes.	
§63.5(c)		No	[Reserved].
§63.5(d)	Application for Approval of Construction/Reconstruction	Yes.	
§63.5(e)	Approval of Construction/Reconstruction	Yes.	
§63.5(f)	Approval of Construction/Reconstruction Based on State Review	Yes.	
§63.6(a)	Compliance with Standards and Maintenance—Applicability	Yes.	
§63.6(b)(1)-(5)	New and Reconstructed Sources-Dates	Yes.	
§63.6(b)(6)		No	[Reserved].

§63.6(b)(7)		Yes.	
§63.6(c)(1)-(2)	Existing Sources Dates	Yes	§63.2985 specifies dates.
§63.6(c)(3)-(4)		No	[Reserved].
§63.6(c)(5)		Yes.	
§63.6(d)		No	[Reserved].
§63.6(e)(1)(i)	General Duty to Minimize Emissions	No, for new or reconstructed sources which commenced construction or reconstruction after April 6, 2018. Yes, for all other affected sources before August 28, 2019, and No thereafter	See §63.2986(g) for general duty requirement.
§63.6(e)(1)(ii)	Requirement to Correct Malfunctions As Soon As Possible	No, for new or reconstructed sources which commenced construction or reconstruction after April 6, 2018. Yes, for all other affected sources before August 28, 2019, and No thereafter	
§63.6(e)(1)(iii)	Operation and Maintenance Requirements	Yes	§§63.2984 and 63.2987 specify additional requirements.
§63.6(e)(2)		No	[Reserved].
§63.6(e)(3)	SSM Plan Requirements	No, for new or reconstructed sources which commenced construction or reconstruction after April 6, 2018. Yes, for all other affected sources before August 28, 2019, and No thereafter	
§63.6(f)(1)	SSM Exemption	No, for new or reconstructed sources which commenced construction or reconstruction after April 6, 2018. Yes, for all other affected sources before August 28, 2019, and No thereafter	
§63.6(f)(2) and (3)	Compliance with Non-Opacity Emission Standards	Yes.	

§63.6(g)	Alternative Non-Opacity Emission Standard	Yes	EPA retains approval authority.
§63.6(h)	Compliance with Opacity/Visible Emissions Standards	No	Subpart HHHH does not specify opacity or visible emission standards.
§63.6(i)(1)-(14)	Extension of Compliance	Yes.	
§63.6(i)(15)		No	[Reserved].
§63.6(i)(16)		Yes.	
§63.6(j)	Exemption from Compliance	Yes.	
§63.7(a)	Performance Test Requirements—Applicability and Dates	Yes.	
§63.7(b)	Notification of Performance Test	Yes.	
§63.7(c)	Quality Assurance Program/Test Plan	Yes.	
§63.7(d)	Testing Facilities	Yes.	
§63.7(e)(1)	Performance Testing	No, for new or reconstructed sources which commenced construction or reconstruction after April 6, 2018. Yes, for all other affected sources before August 28, 2019, and No thereafter	See §63.2992(c).
§63.7(e)(2)-(4)	Conduct of Tests	Yes	§§63.2991-63.2994 specify additional requirements.
§63.7(f)	Alternative Test Method	Yes	EPA retains approval authority
§63.7(g)	Data Analysis	Yes.	
§63.7(h)	Waiver of Tests	Yes.	
§63.8(a)(1)-(2)	Monitoring Requirements—Applicability	Yes.	
§63.8(a)(3)		No	[Reserved].
§63.8(a)(4)		Yes.	
§63.8(b)	Conduct of Monitoring	Yes.	
§63.8(c)(1)(i)	General Duty to Minimize Emissions and CMS Operation	No, for new or reconstructed sources which commenced construction or reconstruction after April 6, 2018. Yes, for all other affected sources before	

		August 28, 2019, and No thereafter	
§63.8(c)(1)(ii)	Continuous Monitoring System (CMS) Operation and Maintenance	Yes.	
§63.8(c)(1)(iii)	Requirement to Develop SSM Plan for CMS	No, for new or reconstructed sources which commenced construction or reconstruction after April 6, 2018. Yes, for all other affected sources before August 28, 2019, and No thereafter	
§63.8(c)(2)-(4)		Yes.	
§63.8(c)(5)	Continuous Opacity Monitoring System (COMS) Procedures	No	Subpart HHHH does not specify opacity or visible emission standards.
§63.8(c)(6)-(8)		Yes.	
§63.8(d)(1) and (2)	Quality Control	Yes.	
§63.8(d)(3)	Written Procedures for CMS	No, for new or reconstructed sources which commenced construction or reconstruction after April 6, 2018. Yes, for all other affected sources before August 28, 2019, and No thereafter	See §63.2994(a).
§63.8(e)	CMS Performance Evaluation	Yes.	
§63.8(f)(1)-(5)	Alternative Monitoring Method	Yes	EPA retains approval authority.
§63.8(f)(6)	Alternative to Relative Accuracy Test	No	Subpart HHHH does not require the use of continuous emissions monitoring systems (CEMS).
§63.8(g)(1)	Data Reduction	Yes.	
§63.8(g)(2)	Data Reduction	No	Subpart HHHH does not require the use of CEMS or COMS.
§63.8(g)(3)-(5)	Data Reduction	Yes.	
§63.9(a)	Notification Requirements—Applicability	Yes.	

§63.9(b)	Initial Notifications	Yes.	
§63.9(c)	Request for Compliance Extension	Yes.	
§63.9(d)	New Source Notification for Special Compliance Requirements	Yes.	
§63.9(e)	Notification of Performance Test	Yes.	
§63.9(f)	Notification of Visible Emissions/Opacity Test	No	Subpart HHHH does not specify opacity or visible emission standards.
§63.9(g)(1)	Additional CMS Notifications	Yes.	
§63.9(g)(2)-(3)		No	Subpart HHHH does not require the use of COMS or CEMS.
§63.9(h)(1)-(3)	Notification of Compliance Status	Yes	§63.3000(b) specifies additional requirements.
§63.9(h)(4)		No	[Reserved].
§63.9(h)(5)-(6)		Yes.	
§63.9(i)	Adjustment of Deadlines	Yes.	
§63.9(j)	Change in Previous Information	Yes.	
§63.10(a)	Recordkeeping/Reporting—Applicability	Yes.	
§63.10(b)(1)	General Recordkeeping Requirements	Yes	§63.2998 includes additional requirements.
§63.10(b)(2)(i)	Recordkeeping of Occurrence and Duration of Startups and Shutdowns	No, for new or reconstructed sources which commenced construction or reconstruction after April 6, 2018. Yes, for all other affected sources before August 28, 2019, and No thereafter	
§63.10(b)(2)(ii)	Recordkeeping of Failures to Meet a Standard	No, for new or reconstructed sources which commenced construction or reconstruction after April 6, 2018. Yes, for all other affected sources before August 28, 2019, and No thereafter	See §63.2998(g) for recordkeeping requirements for an affected source that fails to meet an applicable standard.
§63.10(b)(2)(iii)	Maintenance Records	Yes.	

§63.10(b)(2)(iv) and (v)	Actions Taken to Minimize Emissions During SSM	No, for new or reconstructed sources which commenced construction or reconstruction after April 6, 2018. Yes, for all other affected sources before August 28, 2019, and No thereafter	
§63.10(b)(2)(vi)	Recordkeeping for CMS Malfunctions	Yes.	
§63.10(b)(2)(vii)-(xiv)	Other CMS Requirements	Yes.	
§63.10(b)(3)	Recordkeeping requirement for applicability determinations	Yes.	
§63.10(c)(1)	Additional CMS Recordkeeping	Yes.	
§63.10(c)(2)-(4)		No	[Reserved].
§63.10(c)(5)-(8)		Yes.	
§63.10(c)(9)		No	[Reserved].
§63.10(c)(10)-(14)		Yes.	
§63.10(c)(15)	Use of SSM Plan	No, for new or reconstructed sources which commenced construction or reconstruction after April 6, 2018. Yes, for all other affected sources before August 28, 2019, and No thereafter	
§63.10(d)(1)	General Reporting Requirements	Yes	§63.3000 includes additional requirements.
§63.10(d)(2)	Performance Test Results	Yes	§63.3000 includes additional requirements.
§63.10(d)(3)	Opacity or Visible Emissions Observations	No	Subpart HHHH does not specify opacity or visible emission standards.
§63.10(d)(4)	Progress Reports Under Extension of Compliance	Yes.	
§63.10(d)(5)	SSM Reports	No, for new or reconstructed sources which commenced construction or reconstruction after April 6, 2018. Yes, for all other	See §63.3000(c) for malfunction reporting requirements.

		affected sources before August 28, 2019, and No thereafter	
§63.10(e)(1)	Additional CMS Reports—General	No	Subpart HHHH does not require CEMS.
§63.10(e)(2)	Reporting results of CMS performance evaluations.	Yes.	
§63.10(e)(3)	Excess Emission/CMS Performance Reports.	Yes.	
§63.10(e)(4)	COMS Data Reports	No	Subpart HHHH does not specify opacity or visible emission standards.
§63.10(f)	Recordkeeping/Reporting Waiver	Yes	EPA retains approval authority.
§63.11	Control Device Requirements—Applicability.	No	Facilities subject to subpart HHHH do not use flares as control devices.
§63.12	State Authority and Delegations	Yes.	
§63.13	Addresses	Yes.	
§63.14	Incorporation by Reference	Yes	See §63.14(b)(2) and (3) for applicability requirements.
§63.15	Availability of Information/Confidentiality	Yes.	

[84 FR 6697, Feb. 28, 2019]

Appendix A to Subpart HHHH of Part 63—Method for Determining Free-Formaldehyde in Urea-Formaldehyde Resins by Sodium Sulfite (Iced & Cooled)

1.0 Scope

This procedure corresponds to the Housing and Urban Development method of determining free-formaldehyde in urea-formaldehyde resins. This method applies to samples that decompose to yield formaldehyde under the conditions of other free-formaldehyde methods. The primary use is for urea-formaldehyde resins.

2.0 Part A—Testing Resins

Formaldehyde will react with sodium sulfite to form the sulfite addition products and liberate sodium hydroxide (NaOH); however, at room temperature, the methanol groups present will also react to liberate NaOH. Titrate at 0 degrees Celsius (°C) to minimize the reaction of the methanol groups.

2.1 Apparatus Required.

2.1.1 Ice crusher.

2.1.2 One 100-milliliter (mL) graduated cylinder.

2.1.3 Three 400-mL beakers.

2.1.4 One 50-mL burette.

2.1.5 Analytical balance accurate to 0.1 milligrams (mg).

2.1.6 Magnetic stirrer.

2.1.7 Magnetic stirring bars.

2.1.8 Disposable pipettes.

2.1.9 Several 5-ounce (oz.) plastic cups.

2.1.10 Ice cube trays (small cubes).

2.2 Materials Required.

2.2.1 Ice cubes (made with distilled water).

2.2.2 A solution of 1 molar (M) sodium sulfite (Na_2SO_3) (63 grams (g) Na_2SO_3/500 mL water (H_2O) neutralized to thymolphthalein endpoint).

2.2.3 Standardized 0.1 normal (N) hydrochloric acid (HCl).

2.2.4 Thymolphthalein indicator (1.0 g thymolphthalein/199 g methanol).

2.2.5 Sodium chloride (NaCl) (reagent grade).

2.2.6 Sodium hydroxide (NaOH).

2.3 Procedure.

2.3.1 Prepare sufficient quantity of crushed ice for three determinations (two trays of cubes).

2.3.2 Put 70 cubic centimeters (cc) of 1 M Na_2SO_3 solution into a 400-mL beaker. Begin stirring and add approximately 100 g of crushed ice and 2 g of NaCl. Maintain 0 °C during test, adding ice as necessary.

2.3.3 Add 10-15 drops of thymolphthalein indicator to the chilled solution. If the solution remains clear, add 0.1 N NaOH until the solution turns blue; then add 0.1 N HCl back to the colorless endpoint. If the solution turns blue upon adding the indicator, add 0.1 N HCl to the colorless endpoint.

2.3.4 On the analytical balance, accurately weigh the amount of resin indicated under the "*Resin Sample Size*" chart (see below) as follows.

RESIN SAMPLE SIZE

Approximate free HCHO (percent)	Sample weight (gram(s))
<0.5	10
0.5-1.0	5
1.0-3.0	2
3.0	1

2.3.4.1 Pour about 1 inch of resin into a 5 oz. plastic cup.

2.3.4.2 Determine the gross weight of the cup, resin, and disposable pipette (with the narrow tip broken off) fitted with a small rubber bulb.

2.3.4.3 Pipette out the desired amount of resin into the stirring, chilled solution (approximately 1.5 to 2 g per pipette-full).

2.3.4.4 Quickly reweigh the cup, resin, and pipette with the bulb.

2.3.4.5 The resultant weight loss equals the grams of resin being tested.

2.3.5 Rapidly titrate the solution with 0.1 N HCl to the colorless endpoint described in Step 3 (2.3.3).

2.3.6 Repeat the test in triplicate.

2.4 Calculation.

2.4.1 The percent free-formaldehyde (%HCHO) is calculated as follows:

$$\%HCHO = \frac{(mL\ 0.1\ \text{N HCl})\ (N\ \text{of Acid})\ (3.003)}{Weight\ \text{of Sample}}$$

2.4.2 Compute the average percent free-formaldehyde of the three tests.

(NOTE: If the results of the three tests are not within a range of ±0.5 percent or if the average of the three tests does not meet expected limits, carry out Part B and then repeat Part A.)

3.0 Part B—Standard Check

Part B ensures that test reagents used in determining percent free-formaldehyde in urea-formaldehyde resins are of proper concentration and that operator technique is correct. Should any doubts arise in either of these areas, the formaldehyde standard solution test should be carried out.

3.1 Preparation and Standardization of a 1 Percent Formalin Solution.

Prepare a solution containing approximately 1 percent formaldehyde from a stock 37 percent formalin solution. Standardize the prepared solution by titrating the hydroxyl ions resulting from the formation of the formaldehyde bisulfite complex.

3.2 Apparatus Required.

NOTE: All reagents must be American Chemical Society analytical reagent grade or better.

3.2.1 One 1-liter (L) volumetric flask (class A).

3.2.2 One 250-mL volumetric flask (class A).

3.2.3 One 250-mL beaker.

3.2.4 One 100-mL pipette (class A).

3.2.5 One 10-mL pipette (class A).

3.2.6 One 50-mL graduated cylinder (class A).

3.2.7 A pH meter, standardized using pH 7 and pH 10 buffers.

3.2.8 Magnetic stirrer.

3.2.9 Magnetic stirring bars.

3.2.10 Several 5-oz. plastic cups.

3.2.11 Disposal pipettes.

3.2.12 Ice cube trays (small cubes).

3.3 Materials Required.

3.3.1 A solution of 37 percent formalin.

3.3.2 Anhydrous Na_2SO_3.

3.3.3 Distilled water.

3.3.4 Standardized 0.100 N HCl.

3.3.5 Thymolphthalein indicator (1.0 g thymolphthalein/199 g methanol).

3.4 Preparation of Solutions and Reagents.

3.4.1 Formaldehyde Standard Solution (approximately 1 percent). Measure, using a graduated cylinder, 27.0 mL of analytical reagent 37 percent formalin solution into a 1-L volumetric flask. Fill the flask to volume with distilled water.

(NOTE: You must standardize this solution as described in section 3.5. This solution is stable for 3 months.)

3.4.2 Sodium Sulfite Solution 1.0 M (used for standardization of Formaldehyde Standard Solution). Quantitatively transfer, using distilled water as the transfer solvent, 31.50 g of anhydrous Na_2SO_3 into a 250-mL volumetric flask. Dissolve in approximately 100 mL of distilled water and fill to volume.

(NOTE: You must prepare this solution daily, but the calibration of the Formaldehyde Standard Solution needs to be done only once.)

3.4.3 Hydrochloric Acid Standard Solution 0.100 M. This reagent should be readily available as a primary standard that only needs to be diluted.

3.5 Standardization.

3.5.1 Standardization of Formaldehyde Standard Solution.

3.5.1.1 Pipette 100.0 mL of 1 M sodium sulfite into a stirred 250-mL beaker.

3.5.1.2 Using a standardized pH meter, measure and record the pH. The pH should be around 10. It is not essential the pH be 10; however, it is essential that the value be accurately recorded.

3.5.1.3 To the stirring Na_2SO_3 solution, pipette in 10.0 mL of Formaldehyde Standard Solution. The pH should rise sharply to about 12.

3.5.1.4 Using the pH meter as a continuous monitor, titrate the solution back to the original exact pH using 0.100 N HCl. Record the milliliters of HCl used as titrant. (NOTE: Approximately 30 to 35 mL of HCl will be required.)

3.5.1.5 Calculate the concentration of the Formaldehyde Standard Solution using the equation as follows:

$$\%HCHO = \frac{(mL\ \mathrm{HCl})\ (\mathrm{N\ HCl})\ (3.003)}{\mathrm{mL\ sample}}$$

3.6 Procedure.

3.6.1 Prepare a sufficient quantity of crushed ice for three determinations (two trays of cubes).

3.6.2 Put 70 cc of 1 M Na_2SO_3 solution into a 400-mL beaker. Begin stirring and add approximately 100 g of crushed ice and 2 g NaCl. Maintain 0 °C during the test, adding ice as necessary.

3.6.3 Add 10-15 drops of thymolphthalein indicator to the chilled solution. If the solution remains clear, add 0.1 N NaOH until the solution turns blue; then add 0.1 N HCl back to the colorless endpoint. If the solution turns blue upon adding the indicator, add 0.1 N HCl to the colorless endpoint.

3.6.4 On the analytical balance, accurately weigh a sample of Formaldehyde Standard Solution as follows.

3.6.4.1 Pour about 0.5 inches of Formaldehyde Standard Solution into a 5-oz. plastic cup.

3.6.4.2 Determine the gross weight of the cup, Formaldehyde Standard Solution, and a disposable pipette fitted with a small rubber bulb.

3.6.4.3 Pipette approximately 5 g of the Formaldehyde Standard Solution into the stirring, chilled Na_2SO_3 solution.

3.6.4.4 Quickly reweigh the cup, Formaldehyde Standard Solution, and pipette with the bulb.

3.6.4.5 The resultant weight loss equals the grams of Formaldehyde Standard Solution being tested.

3.6.5 Rapidly titrate the solution with 0.1 N HCl to the colorless endpoint in Step 3 (3.6.3).

3.6.6 Repeat the test in triplicate.

3.7 Calculation for Formaldehyde Standard Solution.

3.7.1 The percent free-formaldehyde (% HCHO) is calculated as follows:

$$\%HCHO = \frac{(mL\ 0.1\ \text{N HCl})(N\ \text{Acid})(3.003)}{Weight\ \text{of Formaldehyde Standard Solution}}$$

3.7.2 The range of the results of three tests should be no more than ±5 percent of the actual Formaldehyde Standard Solution concentration. Report results to two decimal places.

3.8 Reference.

West Coast Adhesive Manufacturers Trade Association Test 10.1.

Appendix B to Subpart HHHH of Part 63—Method for the Determination of Loss-on-Ignition

1.0 Purpose

The purpose of this test is to determine the loss-on-ignition (LOI) of wet-formed fiberglass mat.

2.0 Equipment

2.1 Scale sensitive to 0.001 gram (g).

2.2 Drying oven equipped with a means of constant temperature regulation and mechanical air convection.

2.3 Furnace designed to heat to at least 625 °C (1,157 °F) and controllable to ±25 °C (±45 °F).

2.4 Crucible, high form, 250 milliliter (mL).

2.5 Desiccator.

2.6 Pan balance (see Note 2 in 4.9)

3.0 Sample Collection Procedure

3.1 Obtain a sample of mat in accordance with Technical Association of the Pulp and Paper Industry (TAPPI) method 1007 "Sample Location."

3.2 Use a 5- to 10-g sample cut into pieces small enough to fit into the crucible.

3.3 Place the sample in the crucible. (NOTE 1: To test without the use of a crucible, see Note 2 after Section 4.8.)

3.4 Condition the sample in the furnace set at 105 ±3 °C (221 ±9 °F) for 5 minutes ±30 seconds.

4.0 Procedure

4.1 Condition each sample by drying for 5 minutes ±30 seconds at 105 ±3 °C (22 ±5 °F).

4.2 Remove the test sample from the furnace and cool in the desiccator for 30 minutes in the standard atmosphere for testing glass textiles.

4.3 Place the empty crucible in the furnace at 625 ±25 °C (1,157 ±45 °F). After 30 minutes, remove and cool the crucible in the standard atmosphere (TAPPI method 1008) for 30 minutes.

4.4 Identify each crucible with respect to each test sample of mat.

4.5 Weigh the empty crucible to the nearest 0.001 g. Record this weight as the tare mass, T.

4.6 Place the test sample in the crucible and weigh to the nearest 0.001 g. Record this weight as the initial mass, A.

4.7 Place the test sample and crucible in the furnace and ignite at 625 ±25 °C (1,157 ±45 °F).

4.8 After ignition for at least 30 minutes, remove the test sample and crucible from the furnace and cool in the desiccator for 30 minutes in the standard atmosphere (TAPPI method 1008).

4.9 Remove each crucible, and test each sample separately from the desiccator, and immediately weigh each sample to the nearest 0.001 g. Record this weight as the ignited mass, B. (NOTE 2: When it is known that no ash residue separates from the test sample during the weighing and igniting processes, you may weigh the sample separately without the crucible. When this occurs, the tare mass (T) equals zero. With appropriate care, you can dry and weigh a single piece of mat and place with tongs into the ignition oven on appropriate refractory supports. When the ignition time is over, remove the sample as an intact fragile web and weigh it directly on a pan balance.)

5.0 Calculation

5.1 Calculate the LOI for each sample as follows:

$$\% \text{ LOI} = 100 \times (A - B) / (A - T)$$

Where:

A = initial mass of crucible and sample before ignition (g);

B = mass of crucible and glass residue after ignition (g); and

T = tare mass of crucible, (g) (see Note 2).

5.2 Report the percent LOI of the glass mat to the nearest 0.1 percent.

6.0 Precision

The repeatability of this test method for measurements on adjacent specimens from the same sample of mat is better than 1 percent.

APPENDIX B

Compliance Assurance Monitoring (CAM) Plan

COMPLIANCE ASSURANCE MONITORING PLAN

The CAM rule (40 CFR Part 64) requires monitoring plans (CAM plans) for certain emissions units with control devices at Part 70 major sources. The Mat Line Oven Thermal Oxidizer is the only control device at the facility subject to CAM, due to uncontrolled VOC emissions potentially being greater than 100 tons/year.

Mat Line Oven with Thermal Oxidizer (SN-01)

The CAM Plan below addresses VOC emissions. Note that the HAP emissions are not required to be addressed by the CAM Plan since they are already addressed by the MACT rule (40 CFR Part 63, Subpart HHHH). The thermal oxidizer controls both VOC and organic HAP emissions. In effect, the monitoring requirements of the MACT regulation also act as CAM requirements for VOCs.

CAM Plan
SN-01 For VOC Control

I. Background

A. Emissions Unit

- Description: Mat Line Thermal Oxidizer (SN-01)

B. Applicable Regulation, Emission Limit, & Monitoring Requirements

- Applicable Regulation: ADEQ Permit 747-AOP-R4
- Proposed Emission Limits: 3.0 lb/hr VOC
- Proposed Monitoring Requirements: Continuous monitoring of thermal oxidizer temperature.

C. Control Technology

- Thermal oxidizer combusts organic compounds contained in exhausts from mat line oven.

II. Monitoring Approach

A. Indicator

- Thermal oxidizer temperature.

B. Measurement Approach

- Continuous monitoring of thermal oxidizer temperature.

C. Indicator Range

- Thermal oxidizer temperature no less than 1385 ºF, 3-hour block average.

D. QIP Threshold

- The QIP threshold is 5% duration of the process operating time over a 6-month period.

E. Performance Criteria

- Data Representativeness: Minimum thermal oxidizer temperature and compliance with VOC emission limit has been verified through stack testing.
- Verification of Operational Status: Thermal oxidizer temperature is continuously monitored electronically.
- QA/QC Practices: Thermal oxidizer is inspected periodically to ensure integrity.
- Monitoring Frequency and Data Collection Procedure: The thermal oxidizer is classified as a small PSEU, therefore the minimum required monitoring frequency is once per day (when process is in operation). Thermal oxidizer temperature is continuously monitored electronically as per the MACT regulation, so the daily monitoring requirement is automatically met.

III. Justification

A. Background

- The thermal oxidizer is a typical emissions control technology for the destruction of organic compounds.

B. Rationale for Selection of Performance Indicator

- Monitoring of thermal oxidizer temperature is a widely accepted method of verifying proper operation.

C. Rationale for Selection of Indicator Level

- Minimum thermal oxidizer temperature and compliance with VOC emission limit has been verified through stack testing.

PROPOSED MONITORING PLAN FOR SN-11 FOR VOC CONTROL

1. Background
   a. Emissions Unit
      i. Facility: Owens Corning Non-Woven Technology, LLC - Fort Smith, Arkansas
      ii. Description: Regenerative Thermal Oxidizer (SN-11)
   b. Applicable Regulation, Emission Limit, Monitoring Requirements
      i. Applicable Regulation: Regulation 19, Section 19.501
      ii. Proposed Emission Limit: 8.01 lb/hr VOC
      iii. Proposed Monitoring Requirements: Continuous monitoring of thermal oxidizer temperature
   c. Control Technology
      i. RTO combusts organic compounds contained in exhausts from drying oven

2. Monitoring Approach
   a. Indicator
      i. RTO temperature
   b. Measurement Approach
      i. Continuous monitoring of RTO temperature
   c. Indicator Range
      i. RTO temperature no less than the minimum for any three-hour block average during operation
      ii. Minimum temperature will be established using the most recent performance test required by MACT Subpart HHHH
   d. QIP Threshold
      i. The QIP threshold is 5% duration of the process operating time over a 6-month period
   e. Performance Criteria
      i. Data Representativeness: Minimum RTO temperature and compliance with VOC emission limit has been verified through stack testing.
      ii. Verification of Operational Status: RTO temperature is continuously monitored electronically.
      iii. QA/QC Practices: RTO is inspected periodically to ensure integrity.
      iv. Monitoring Frequency and Data Collection Procedure: The RTO is classified as a small pollutant-specific emission unit (PSEU), therefore the minimum required monitoring frequency is once per day (when process is in operation). RTO temperature is continuously monitored electronically as per the MACT regulation, so the daily monitoring requirement is automatically met.

PROPOSED MONITORING PLAN FOR SN-11 FOR VOC CONTROL

3. Justification

   a. Background

   i. The RTO is a typical emissions control technology for the destruction of organic compounds.

   b. Rationale for Selection of Performance Indicator

   i. Monitoring of RTO temperature is a widely accepted method of verifying proper operation.

   c. Rationale for Selection of Indicator Level

   i. Minimum RTO temperature and compliance with VOC emission limit will be verified through stack testing