NORTH CAROLINA DIVISION OF AIR QUALITY

Application Review

Issue Date:

Region: Raleigh Regional Office
County: Granville
NC Facility ID: 3900120
Inspector's Name: NA
Date of Last Inspection: NA
Compliance Code: NA

Facility Data

Applicant (Facility's Name): Certainteed LLC - Oxford Facility

Facility Address:
Certainteed LLC - Oxford Facility
200 Certainteed Drive
Oxford, NC 27565

SIC: 3229 / Pressed And Blown Glass, Nec
NAICS: 327212 / Other Pressed and Blown Glass and Glassware Manufacturing

Facility Classification: Before: Permit/Registration Pending **After:** Title V
Fee Classification: Before: N/A **After:** Title V

Permit Applicability (this application only)

SIP: 02D .0515, 0516, .0521, .0524, .0535, .0540, .1111 .1806
NSPS: IIII
NESHAP: ZZZZ, HHHH
PSD: minor
PSD Avoidance: NA
NC Toxics: Yes
112(r): NA
Other: 02D .1100, 02Q .0207, .0304, .0504, .0711

Contact Data

Facility Contact	Authorized Contact	Technical Contact
Kelly Fie EHS Supervisor (252) 431-7320 200 Certainteed Drive Oxford, NC 27565	Pedro Romero Glass Mat General Manager (256) 277-6077 200 Certainteed Drive Oxford, NC 27565	D. Neil Gresham, Jr. Southeast Region EHS Manager (919) 691-2073 200 Certainteed Road Oxford, NC 27565

Application Data

Application Number: 3900120.22A
Date Received: 11/29/2022
Application Type: Greenfield Facility
Application Schedule: State
Existing Permit Data
Existing Permit Number: N/A
Existing Permit Issue Date: N/A
Existing Permit Expiration Date: N/A

Total Actual emissions in TONS/YEAR:

CY	SO2	NOX	VOC	CO	PM10	Total HAP	Largest HAP

<No Inventory>

Review Engineer: Joseph Voelker

Review Engineer's Signature: **Date**:

Comments / Recommendations:
Issue 10773/R00
Permit Issue Date:
Permit Expiration Date:

I. Purpose of Application

CertainTeed LLC (CertainTeed) is proposing to construct a fiberglass mat manufacturing facility (SIC code 3329) at 200 CertainTeed Road, Oxford, NC 27565 (Oxford facility). CertainTeed is submitting this application package to the North Carolina Department of Environmental Quality (DEQ) in accordance with 15A NCAC 02Q .0304 to obtain a permit to construct and operate the proposed facility.

This application is being submitted as part one of a two-step significant modification pursuant to 15A NCAC 02Q .0501(b)(2) and 02Q .0504.

II. Chronology

Date	Description
November 29, 2022	An application was received and assigned application no. 3900120.22A
December 16, 2022	Application fee received. Application deemed complete for processing.
February 21, 2023	ADD INFO email sent requesting supporting calculations
February 27, 2023	Information requested on February 21, 2023, received via email.
March 7, 2023	The AQAB issued a memo stating that "the modeling adequately demonstrates compliance on a source-by-source basis" with the formaldehyde AAL with a maximum impact of 86% of the AAL.
March 17, 2023	ADD INFO email sent requesting: 1. Current status of Arkansas facility source testing that was used for PM emission estimation purposes. 2. MACT HHHH capture system capture efficiency determination procedures 3. Verification of the SIC code submitted with application 4. HAP/TAP differences between the proposed facility and existing similar facilities. Email included as an attachment to this review.
April 7, 2023	Email received in response to ADD INFO email sent on March 17, 2023. Item 3 addressed adequately. Other items will be elaborated on in subsequent correspondence. Email included as an attachment to this review.
April 20, 2023	Email received in response to ADD INFO email sent on March 17, 2023. Item 1 was addressed. 4 pdfs with the results of the testing were sent. Email included as an attachment to this review.
April 26, 2023	Joe Voelker of the DAQ sent an email discussing the information submitted via email on April 20, 2023. Mr. Voelker asked for justification why the VOC and HAP numbers at the Arkansas facility were not representative of the proposed facility. This is related to Item 4 in the email sent on March 17, 2023. Email included as an attachment to this review
May 2, 2023	Email received in response to ADD INFO email sent on March 17, and April 26, 2023. Item 4 addressed adequately. Email included as an attachment to this review
May 9, 2023	In person meeting with Douglas Gresham of CertainTeed at the RCO. Mr. Gresham shared drawings and his plan for verification that the capture system on the drying oven will meet the compliance required under MACT HHHH at 63.2984(e). This addresses Item 2 in the ADD INFO email sent on March 17, 2023. Ultimately, the final flows, hood arrangement, face velocities etc. will not be known until commissioning. However, Mr. Gresham communicated that the plan was to verify that the hood would achieve 100 % capture. The permit will require the submittal of information to support compliance with 63.2984(e) with the results of the initial performance test.
May 11, 2023	Draft Permit sent to CertainTeed via email for comments.
June 5, 2023	Comments from CertainTeed received via email. Comments included the following statement: "We have a few updates to insignificant activities, as well as an update to the RTO heat input capacity. The slight change in formaldehyde resulting from the RTO heat input capacity change does not exceed the modeled emission rate from the RTO stack – therefore, there are no changes to regulatory requirements with the change."
June 5, 2023	Joe Voelker sent CertainTeed the following email: "Please provide all necessary revised forms including the insig list so the app matches what was ultimately permitted. Make sure in the revised C3 form for the RTOs you provide a clear explanation of the control system including operating scenarios.

Date	Description
	Please confirm the dispersion parameters used in the TAP modeling are still representative of the revised control system."
June 12, 2023	Information requested on June 5, 2023 received via email.
June 12, 2023	Revised draft permit sent to Permittee for review.
June 16, 2023	Email was received from CertainTeed stating: "This draft looks good "
~~MM DD YYYY~~	~~Draft permit published on NCDENR website~~
~~MM DD YYYY~~	~~Public comment period ended. Comments TBD~~

III. Proposed Facility Discussion

The proposed fiberglass mat manufacturing facility is on contiguous property with the existing CertainTeed asphalt roofing manufacturing plant at 200 CertainTeed Road (Facility ID No. 3900040) CertainTeed submitted an applicability determination request to the North Carolina DEQ in October 2022 to request confirmation that the proposed fiberglass mat manufacturing facility and the existing asphalt roofing manufacturing plant would be considered separate sources with respect to the Title V and Prevention of Significant Deterioration (PSD) permit programs. DEQ confirmed this conclusion in an applicability determination letter on October 11, 2022, which is provided in Appendix C of the application. Therefore, this facility will be considered a "greenfield facility" and not a modified existing facility with respect to any applicable air permitting programs.

CertainTeed will be installing the following equipment with this project. A detailed project description is provided below.

- One (1) fiberglass mat production line
- One (1) eight-stage drying and curing oven with an associated regenerative thermal oxidizer (RTO)
- Five (5) vacuum blowers
- One (1) emergency diesel fire pump engine
- Multiple natural gas-fired heaters and air make-up units
- Various storage/mixing tanks for raw materials

The proposed facility will produce fiberglass mat rolls from various raw materials. These rolls will then be distributed to CertainTeed asphalt roofing manufacturing facilities throughout the United States. A process description is provided below, and a process flow diagram is provided in Appendix A of the application.

Receiving and Preparation
Chopped glass fibers, resin, latex, and other minor ingredients are delivered to the site via truck. Resin and latex are transferred to storage tanks, while other ingredients are stored in drums, totes, or bins.

White Water and Mat Forming
In the wet-formed fiberglass mat production process, wet chop fiberglass is mixed with white water in large mixing tanks. The white water contains varying combinations of water, viscosity modifier, dispersant, defoamer, biocide, and/or caustic. The glass fiber slurry is then pumped to a mat forming machine, where it is dispensed in a uniform curtain over a moving belt. The moving belt passes over a vacuum system, where vacuum is pulled through the material to ensure maximum recycling of the excess white water.

Binder Application
The mat then moves beneath a binder saturater, where binder solution is uniformly applied onto the surface of the mat. The binder consists of varying combinations of water, urea-formaldehyde resin, latex, and/or other additives and is mixed in a binder room according to the specified recipe. In the binder application process, the mat again passes over vacuum systems, where a vacuum is pulled through the material to ensure maximum recycling of the excess binder and to saturate the sheet. Air from the vacuum blowers is routed through a series of moisture separators to ensure all liquid is removed before venting to the atmosphere.

Drying and Curing
The mat then enters the 8-stage dryer and is cured at approximately 475°F to set the binder. Heat is provided by combustion of natural gas. Emissions from the drying process are controlled by two regenerative thermal oxidizers (RTOs) in parallel which then exhaust from a common stack. All oven burners are direct-fired and exhaust from the RTO stack.

Finishing
Cured mat exits the dryer and is fed to the finishing area. Mats are trimmed and cut to size by the slitter and then wound into rolls. The trim is cut into sections before being fed to a baler where it is compressed and recycled. Particulate matter produced by the slitter is controlled by a dust collector. Finished product contains a small quantity of formaldehyde when processed in the finishing area, therefore, formaldehyde emissions are expected from the dust collector stack. It is assumed that any particulate generated from the trim baler is negligible, as this process vents indoors.

Support Operations
In support of the fiberglass mat manufacturing operations, the proposed facility will utilize several natural gas-fired heaters and air make-up units. In addition, the facility will include a diesel fire pump engine.

The sources will appear in the permit as follows:

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
ES-FPL	Fiberglass mat production line (29,901 pounds per hour maximum throughput capacity)	NA	NA
ES-MDC	Natural gas-fired mat curing and drying oven (135 million Btu per hour maximum heat input, 29,901 pounds per hour maximum throughput capacity)	CD-RTO1 CD-RTO2	Two natural gas-fired regenerative thermal oxidizer (9.8 million Btu per hour maximum heat input rate, each)
ES-MFA	Mat line finishing area (29,901 pounds per hour maximum throughput capacity)	CD-DC1	Dust collector (1,808 square feet of filter area)

Note that some of the sources discussed in **Receiving and Preparation, White water and Mat Forming, and Support Operations** above are considered to be insignificant activities based on size or production rate pursuant to 15A NCAC 02Q .0503(8) and will appear in Section 3 of the permit as follows:

Emission Source ID No.	Emission Source Description[1,2]
I-FP1 **NSPS IIII, MACT ZZZZ**	Diesel-fired emergency fire pump (200 horsepower output)
I-P-1, I-P-2	Two pulpers containing fibers, white-water and dispersant mixture (35,663 gallon each)
I-DC	Dump chest containing fibers, white-water and defoamer mixture (52,834 gallon capacity)
I-MC	Machine chest containing fibers, white-water and defoamer mixture (42,268 gallon capacity)
I-CLC	Constant level chest containing fibers, white-water and defoamer mixture (42,268 gallon capacity)
I-WWT-1	White water tank no. 1 containing fiber and white-water mixture (150,578 gallon capacity)
I-PWWT	Process water working tower containing white-water, viscosity modifier and biocide mixture (144,766 gallon capacity)
I-PWST-1, I -PWST-2	Two process water storage tanks no.1 & no.2 for white-water storage (90,611 gallon capacity each)
I-WWT-2, I-WWT-3	Two white-water tanks no. 2 and no.3 containing fibers, white-water, and caustic mixture (19, 813 gallon capacity each)
I-CWT	Clarified water tank for white-water (15,850 gallon capacity)
I-BPC	Broke pit chest containing fibers, white-water, viscosity modifier, and defoamer mixture (42,268 gallon capacity)
I-RT-1, I-RT-2, I-RT-3	Three resin tanks (15,000 gallon capacity each)
I-LT-1, I-LT-2	Two latex tanks (7,925 gallon capacity each)
I-BSTT	Binder storage tank (TBD gallon capacity)
I-BSET	Binder seal tank (528 gallon capacity)
I-BWT	Binder working tank (1,849 gallon capacity)
I-BMT	Binder mixing tank (TBD gallon capacity)
I-WWWT	White-water washdown tank (TBD gallon capacity)
I-TB	Trim baler (1,500 feet per minute process rate)
I-MAU-101 through I-MAU-801	Ten natural gas-fired makeup air units (0.20 million Btu per hour heat input each)
I-FCU-101 and I-FCU-501	Two natural gas-fired fan coil units (0.01 million Btu per hour heat input each)
I-AHU-601	Natural gas-fired air handling unit (0.42 million Btu per hour heat input)
I-RTU-201	Natural gas-fired rooftop unit (0.08 million Btu per hour heat input)
I-UH-101 through I UH-802	Thirty-four natural gas-fired unit heaters (0.15 million Btu per hour heat input each)

Facility Emissions

The Permittee supplied detailed emission estimates with the application. The following table shows a summary of the facility-wide criteria pollutant emissions. Note that the facility is only a Title V major source for VOC.

Criteria Pollutant Emissions Summary

Pollutant	Potential Emissions			
	Uncontrolled		Controlled	
	(lb/hr)	(tpy)	(lb/hr)	(tpy)
PM	17.00	74.19	13.29	57.92
PM_{10}	17.00	74.19	13.29	57.92
$PM_{2.5}$	16.99	74.13	13.27	57.86
VOC	212.10	923.56	16.94	68.73
SO_2	0.50	0.52	0.50	0.52
CO	14.44	58.52	14.44	58.52
NO_X	17.15	69.66	17.15	69.66
CO_2e	19,245	83,348	19,245	83,348

The following is a summary table of the facility wide HAP and TAP emissions. As expected, formaldehyde, followed by methanol, are the major contributors to the HAP emissions. These HAPs are primarily contained in the binder resin. It will be shown in the 02D .1100 discussion in Section V below that formaldehyde is also the primary TAP of concern.

HAP/TAP Emissions Summary

Pollutant	CAS No.	HAP	TAP	Potential Emissions			
				Uncontrolled		Controlled	
				(lb/hr)	(tpy)	(lb/hr)	(tpy)
1,3-Butadiene	106-99-0	X	X	5.47E-05	1.37E-05	5.47E-05	1.37E-05
Acetaldehyde	75-07-0	X	X	1.08E-03	2.79E-04	1.08E-03	2.79E-04
Acrolein	107-02-8	X	X	1.32E-04	4.49E-05	1.32E-04	4.49E-05
Ammonia	7664-41-7		X	0.51	2.22	0.51	2.22
Benzene	71-43-2	X	X	1.64E-03	1.78E-03	1.64E-03	1.78E-03
Benzo(a)pyrene	50-32-8	X	X	1.90E-07	8.32E-07	1.90E-07	8.32E-07
Cobalt compounds	COC	X		1.33E-05	5.82E-05	1.33E-05	5.82E-05
Formaldehyde	50-00-0	X	X	86.58	379.20	6.06	26.53
Lead compounds	PBC	X		7.91E-05	3.47E-04	7.91E-05	3.47E-04
Methanol	67-56-1	X		84.84	371.60	4.32	18.92
Methyl Methacrylate	80-62-6	X		8.52E-06	3.73E-05	8.52E-06	3.73E-05
Naphthalene	91-20-3	X		2.15E-04	4.53E-04	2.15E-04	4.53E-04
n-Hexane	110-54-3	X	X	0.28	1.25	0.28	1.25
Polycyclic Organic Matter	POM	X		3.32E-04	4.53E-04	3.32E-04	4.53E-04
Selenium compounds	SEC	X		3.80E-06	1.66E-05	3.80E-06	1.66E-05
Toluene	108-88-3	X	X	1.11E-03	2.50E-03	1.11E-03	2.50E-03
Xylene	1330-20-7	X	X	3.99E-04	9.98E-05	3.99E-04	9.98E-05
Total HAP				**171.71**	**752.06**	**10.67**	**46.71**

[1] Naphthalene is classified as polycyclic organic matter and is included in POM. Naphthalene is subtracted from the total to avoid double counting.

IV. Regulatory Review

The regulatory applicability of all permitted sources will be discussed below. Sources will be grouped as possible to limit redundancy. Note that the insignificant activities are discussed in Section V, Facility-wide regulatory Considerations.

A. One fiberglass mat production line (29,901 pounds per hour maximum throughput capacity) (ID No. ES-FPL)

This production line (excluding the drying oven, which will be discussed separately) consists of operations that emit PM/PM10/PM2.5 and VOC/HAP/TAP. These pollutants are emitted to the atmosphere by either being captured by hoods and exhausted to the atmosphere via the vacuum blowers or fugitively.

15A NCAC 02D .0515: PARTICULATES FROM MISCELLANEOUS INDUSTRIAL PROCESSES

This rule applies to stacks, vents, or outlets emitting particulates from industrial processes with no other applicable standards. The allowable emission rate is in terms of pounds per hour and is calculated using the following equations:

For process rates up to 30 tons per hour: E = $4.10(P)^{0.67}$
For process rates greater than 30 tons per hour: E = $55.0(P)^{0.11} - 40$

Where: E = Allowable emission rate in pounds per hour (lb/hr)
P = Process weight in tons per hour (tph)

The maximum process rate is 29,90 lb/hr or 14.95 tph. Using the equation for process rates up to 30 tons per hour results in an allowable emission rate of 25 lb/hr. The Permittee estimates the maximum hourly emission rates from the production line (summing the estimated potential hourly emission rates from the Forms Appendix B of the application) to be 5.5 lb/hr of PM. Thus, compliance with this regulation is expected by a wide margin.

Consistent with DAQ permitting policy for uncontrolled sources with an expectation of a wide margin of compliance, no testing will be required. Monitoring, recordkeeping and reporting will consist of the following:

> The Permittee shall maintain production records such that the process rates "P" in tons per hour, as specified by the formulas contained above, can be derived and shall make these records available to a DAQ authorized representative upon request.
>
> No reporting is required for particulate emissions from the production line.

15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

This regulation applies to fuel burning operations and industrial processes where visible emissions can be reasonably expected to occur. Each furnace has one melter, multiple refiners and multiple forehearths. Each melter, refiner and forehearth has an emission point. Each melter, refiner, and forehearth is subject to this rule.

As the production line was “manufactured” after July 1, 1971, the visible emissions from the production line shall not be more than 20 percent opacity when averaged over a six-minute period except for the following exceptions:

Six-minute averaging periods may exceed 20 percent opacity if:
(1) no six-minute period exceeds 87 percent opacity;
(2) no more than one six-minute period exceeds 20 percent opacity in any hour; and
(3) no more than four six-minute periods exceed 20 percent opacity in any 24-hour period.

Visible emissions from this source are expected to be less than 20 % opacity. However, for conservatism, daily monitoring will be required as follows:

> Monitoring requirements shall consist of daily observations of the emission points of this source for any visible emissions above normal. The daily observation must be made for each day of the calendar year period to ensure compliance with this requirement. The Permittee shall be allowed three (3) days of absent observations per semi-annual period. The Permittee shall establish “normal” for this source in the first 30 days following the effective date of the permit / of beginning operation If visible emissions from these sources are observed to be above normal, the Permittee shall either:
> i. Take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements, or
> ii. Demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 02D .2610 (Method 9) for 12 minutes is below the applicable opacity limit.

Recordkeeping for the results of the monitoring requirements and a semiannual summary report of the monitoring and recordkeeping requirements will also be required.

State Enforceable Only
15A NCAC 02D .1100: CONTROL OF TOXIC AIR POLLUTANTS
See discussion in SECTION V below.

State Enforceable Only
15A NCAC 02D .1806: CONTROL AND PROHIBITION OF ODOROUS EMISSIONS
See discussion in SECTION V below.

B. Natural gas-fired mat curing and drying oven (135 million Btu per hour maximum heat input, 29,901 pounds per hour maximum throughput capacity) (ID No. ES-MDC) controlled by a natural gas-fired-regenerative thermal oxidizer (9.8 million Btu per hour maximum heat input rate) (ID No. CD-RTO1 and CD-RTO-2) operating in parallel and exhausting to a common stack

As described in Section III above, fiberglass mat enters the 8-stage dryer and is cured at approximately 475°F to set the binder. Heat is provided by combustion of natural gas. Emissions from the drying process are controlled by two RTOs operating in parallel and exhausting to a common stack. All oven burners are direct-fired and exhaust from the RTO stack. Hence the emissions consist of natural gas combustion emissions and from the process HAP/TAP, VOC, and PM/PM10 PM2.5.

15A NCAC 02D .0515: PARTICULATES FROM MISCELLANEOUS INDUSTRIAL PROCESSES

This rule applies to stacks, vents, or outlets emitting particulates from industrial processes with no other applicable standards. The allowable emission rate is in terms of pounds per hour and is calculated using the following equations:

For process rates up to 30 tons per hour: $E = 4.10(P)^{0.67}$
For process rates greater than 30 tons per hour: $E = 55.0(P)^{0.11} - 40$

Where: E = Allowable emission rate in pounds per hour (lb/hr)
P = Process weight in tons per hour (tph)

The maximum process rate is 29,901 lb/hr or 14.95 tph. Using the equation for process rates up to 30 tons per hour results in an allowable emission rate of 25 lb/hr. The Permittee estimates the maximum hourly emission rates at the RTO exhaust to be 7.6 lb/hr of PM. Thus, compliance with this regulation is expected by a wide margin.

Consistent with DAQ permitting policy for uncontrolled sources (Note the RTOs are not expected to have any control efficiency with respect to the PM emissions) with an expectation of a wide margin of compliance, no testing will be required. Monitoring, recordkeeping and reporting will consist of the following:

- The Permittee shall maintain production records such that the process rates "P" in tons per hour, as specified by the formulas contained above, can be derived and shall make these records available to a DAQ authorized representative upon request.
- No reporting is required for particulate emissions from the curing and drying oven.

15A NCAC 02D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES

This regulation applies to any combustion source that emits sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances Emissions of sulfur dioxide from these sources shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard.

SO_2 emissions originate from the firing of natural gas in the dryers and the RTOs. The total heat input of the dryer and RTO burners is 135 MMBtu/hr, thus the allowable SO2 emissions are 345 lb/hr. The Permittee has estimated the SO2 emissions (using AP-42 emission factors) to be 0.08 lb/hr.

The SO_2 emissions from firing natural gas (which have inherently low sulfur) in the oven and RTOs are expected to be well below the allowable limit and therefore compliance is expected with this rule by a wide margin. Consistent with current DAQ permitting policy, no testing, monitoring, recordkeeping and reporting is required for SO_2 emissions when firing these fuels.

15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

This regulation applies to fuel burning operations and industrial processes where visible emissions can be reasonably expected to occur. As these boilers were manufactured after July 1, 1971, the visible emissions from these sources shall not be more than 20 percent opacity when averaged over a six-minute period except for the following exceptions:

Six-minute averaging periods may exceed 20 percent opacity if:
(1) no six-minute period exceeds 87 percent opacity;
(2) no more than one six-minute period exceeds 20 percent opacity in any hour; and
(3) no more than four six-minute periods exceed 20 percent opacity in any 24-hour period.

Visible emissions from this source are expected to be less than 20 % opacity. However, for conservatism, daily monitoring will be required as follows:

> Monitoring requirements shall consist of daily observations of the emission points of this source for any visible emissions above normal. The daily observation must be made for each day of the calendar year period to ensure compliance with this requirement. The Permittee shall be allowed three (3) days of absent observations per semi-annual period. The Permittee shall establish "normal" for this source in the first 30 days following the effective date of the permit / of beginning operation If visible emissions from these sources are observed to be above normal, the Permittee shall either:
> i. Take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements, or
> ii. Demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 02D .2610 (Method 9) for 12 minutes is below the applicable opacity limit.

Recordkeeping for the results of the monitoring requirements and a semiannual summary report of the monitoring and recordkeeping requirements will also be required.

15A NCAC 02D .1111: MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY
40 CFR 63 Subpart HHHH "National Emission Standards for Hazardous Air Pollutants for Wet-Formed Fiberglass Mat Production"

The proposed facility has potential controlled emissions of total HAP of 46.61, hence the facility is a major source of HAP. This oven meets the definition of a drying a curing oven at a facility that produces wet-formed fiberglass mat. As such it meets the applicability requirements of 40 CFR 63 Subpart HHHH "National Emission Standards for Hazardous Air Pollutants for Wet-Formed Fiberglass Mat Production" at 40 CFR 63.2981.

The affected source under MACT HHHH is the drying and curing oven and is considered a new affected source under 63.2982. The oven must meet the following emission limits at 63.2983.

(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.

The Permittee has chosen to use two regenerative thermal oxidizers (RTOs) in parallel exhausting to a common stack to meet the emission limits above. The following tables provide a summary of the testing, monitoring recordkeeping and reporting requirements.

MACT HHHH requirements for the drying and curing oven

Requirement Type	Requirement	Citation
Emission Standards	Formaldehyde emissions from each drying and curing oven must be limited to (0.05 pounds per ton fiberglass mat produced); or reducing uncontrolled formaldehyde emissions by 96% or more	§63.2983(a)
Testing and Initial Compliance	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 startup. You must develop an operation, maintenance, and monitoring (OMM) plan. You must submit results of performance test no later than 60 days after completing the test	§63.2986(c) §63.2991(a) §63.2986(e) §63.3000(e)
Operation, Maintenance, and Monitoring (OMM) plan	Your plan must specify the items listed below: ► 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 ► A monitoring schedule that specifies the frequency that the parameter values will be determined and recorded ► The operating limits or ranges for each parameter that represent continuous compliance with the emission limits. Operating limits and ranges must be based on values of the monitored parameters recorded during performance tests	§63.2987(a)

Requirement Type	Requirement	Citation
Operation, Maintenance, and Monitoring (OMM) plan	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 below: ► Inspect all burners, pilot assemblies, and pilot sensing devices for proper operation. Clean pilot sensor if necessary ► Ensure proper adjustment of combustion air and adjust if necessary ► Inspect, when possible, all internal structures (such as baffles) to ensure structural integrity per the design specifications ► Inspect dampers, fans, and blowers for proper operation ► Inspect motors for proper operation ► Inspect, when possible, combustion chamber refractory lining. Clean and repair or replace lining if necessary ► Inspect the thermal oxidizer shell for proper sealing, corrosion, and hot spots ► For the burn cycle that follows the inspection, document that the thermal oxidizer is operating properly and make any necessary adjustments. ► Generally observe whether the equipment is maintained in good operating condition. ► Complete all necessary repairs as soon as practicable ► You must establish procedures for responding to operating parameter deviations. ► Your plan must specify the recordkeeping procedures to document compliance with the emissions and operating limits.	§63.2987(b) §63.2987(c) §63.2987(d)

Requirement Type	Requirement	Citation
Monitoring	You must prescribe the monitoring that will be performed to ensure compliance with emission limitations. Minimum monitoring requirements are listed below: ► Continuously monitor thermal oxidizer temperature ► Calculate the average lb/hr solids application rate of Urea-formaldehyde resin each operating day ► Resin free-formaldehyde content for each lot purchased ► Measure loss-on-ignition at least once per day ► Record urea-formaldehyde to latex ratio in the binder for each batch of binder ► Record the weight of the final mat product per square for each product manufactured during the operating day ► Record average nonwoven wet-formed fiberglass mat production for each product manufactured during the operating day	§63.2996, Table 1
	You must monitor the parameters, at a minimum, at the corresponding frequencies listed except during periods of using a non-HAP binder. If controlling emissions using a thermal oxidizer you must install, calibrate, maintain, and operate a device to continuously monitor thermal oxidizer temperature at the exit of the combustion zone, determine and record average temperature in 15-minute and 3-hour block averages	§63.2997(a)
Recordkeeping/ Continuous Compliance	You must maintain operating parameters within established limits or ranges specified in your OMM plan	§63.2984(a)
	The OMM plan must be maintained	§63.2998(b)
	Maintain records of maintenance and inspections performed on RTO	§63.2998(d)
	Record and maintain reports of deviations of OMM plan parameters	§63.2998(g)
	Records must be maintained for at least 5 years and readily available	§63.2999
	You must submit semiannual compliance reports	§63.3000(c)

The permit will contain all substantial applicable requirements to comply with this rule. Given that the Permittee is using thermal oxidation, the control strategy that is written into the rule, compliance with this rule is expected.

State Enforceable Only
15A NCAC 02D .1100: CONTROL OF TOXIC AIR POLLUTANTS
See discussion in SECTION V below.

State Enforceable Only
15A NCAC 02D .1806: CONTROL AND PROHIBITION OF ODOROUS EMISSIONS
See discussion in SECTION V below.

C. Mat line finishing area (29,901 pounds per hour maximum throughput capacity) (D No. ES-MFA) controlled by a dust collector (1,808 square feet of filter area) (ID No. CD-DC1)

15A NCAC 02D .0515: PARTICULATES FROM MISCELLANEOUS INDUSTRIAL PROCESSES

This rule applies to stacks, vents, or outlets emitting particulates from industrial processes with no other applicable standards. The allowable emission rate is in terms of pounds per hour and is calculated using the following equations:

For process rates up to 30 tons per hour: $E = 4.10(P)^{0.67}$
For process rates greater than 30 tons per hour: $E = 55.0(P)^{0.11} - 40$

Where: E = Allowable emission rate in pounds per hour (lb/hr)
P = Process weight in tons per hour (tph)

The maximum process rate is 29,90 lb/hr or 14.95 tph. Using the equation for process rates up to 30 tons per hour results in an allowable emission rate of 25 lb/hr. The Permittee estimates the maximum hourly controlled emission rates from the finishing area (from the Form B and Appendix B of the application) to be 0.74 lb/hr of PM. The Permittee claims on Form C that the removal efficiency of the dust collector for PM is 99%, which is reasonable for the application. Thus, compliance with this regulation is expected by a wide margin.

Consistent with DAQ permitting policy for sources utilizing filtration with an expectation of a wide margin of compliance, no testing will be required. Monitoring, recordkeeping, and reporting will consist of the following:

Particulate matter emissions from this shall be controlled by the dust collector. To ensure compliance, the Permittee shall perform inspections and maintenance as recommended by the manufacturer. In addition to the manufacturer's inspection and maintenance recommendations, or if there are no manufacturer's inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement shall include the following:

i. a monthly visual inspection of the system ductwork and material collection unit for leaks; and
ii. an annual (for each 12-month period following the initial inspection) internal inspection of the dust collector's structural integrity.

The results of inspection and maintenance shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request.

The Permittee shall submit the results of any maintenance performed on any control device within 30 days of a written request by the DAQ.

The Permittee shall submit a summary report of the monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

This regulation applies to fuel burning operations and industrial processes where visible emissions can be reasonably expected to occur. As these boilers were manufactured after July 1, 1971, the visible emissions from these sources shall not be more than 20 percent opacity when averaged over a six-minute period except for the following exceptions:

Six-minute averaging periods may exceed 20 percent opacity if:
(1) no six-minute period exceeds 87 percent opacity;
(2) no more than one six-minute period exceeds 20 percent opacity in any hour; and
(3) no more than four six-minute periods exceed 20 percent opacity in any 24-hour period.

Visible emissions from this source are expected to be well below 20% opacity given the use of filtration for PM controls. However, consistent with DAQ permitting policy, weekly monitoring will be required as follows:

Monitoring requirements shall consist of weekly observations of the emission points of this source for any visible emissions above normal. The Permittee shall establish "normal" for this source in the first 30 days following the effective date of the permit / of beginning operation If visible emissions from these sources are observed to be above normal, the Permittee shall either:

i. Take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements, or
ii. Demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 02D .2610 (Method 9) for 12 minutes is below the applicable opacity limit.

Recordkeeping for the results of the monitoring requirements and a semiannual summary report of the monitoring and recordkeeping requirements will also be required.

State Enforceable Only
15A NCAC 02D .1100: CONTROL OF TOXIC AIR POLLUTANTS
See discussion in SECTION V below.

State Enforceable Only
15A NCAC 02D .1806: CONTROL AND PROHIBITION OF ODOROUS EMISSIONS
See discussion in SECTION V below.

V. Facility-wide Regulatory Considerations

15A NCAC02D .0524: NEW SOURCE PERFORMANCE STANDARDS (NSPS)

No NSPS standards apply to the fiberglass mat production aspects of this facility. However certain sources, all of which meet the definition of insignificant activities because of size or production rate pursuant to 15 A NCAC 02Q .0503(8.) warrant further discussion below.

40 CFR 60 Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984

The applicability definition states:

> ... the affected facility to which this subpart applies is each storage vessel with a capacity greater than or equal to 75 m3 that is used to store volatile organic liquids (VOLs) for which construction, reconstruction, or modification is commenced after July 23, 1984. This subpart does not apply to storage vessels with a capacity greater than or equal to 151 m3 storing a liquid with a maximum true vapor pressure less than 3.5 kilopascals (kPa) or with a capacity greater than or equal to 75 m3 but less than 151 m3 storing a liquid with a maximum true vapor pressure less than 15.0 kPa.

CertainTeed does not store any VOLs with tanks that meet the size and vapor pressure thresholds of Subpart Kb. Thus, this subpart is not applicable to any of the proposed sources at the Oxford facility.

40 CFR Part 60 Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

This rule applies to owners, and operators of stationary compression ignition (CI) internal combustion engines (ICE) for which construction, modification, or reconstruction was commenced after July 11, 2005, and manufactured after April 1, 2006, for non-fire pump engines, and July 1, 2006, for fire pump engines. The proposed emergency fire pump engine will be constructed after July 1, 2006; therefore, the engine is subject to this subpart.

The rule requires manufacturers of such engines to meet emission standards that are phased in for the size, type of engine application, and model year of the engine.

The proposed fire pump has a maximum engine power of 200 hp and is subject to the emission limits in Table 4 of Subpart IIII for fire pump engines with model years 2009 and later with an engine power greater than or equal to 175 hp and less than 300 hp.

The owners and operators of affected engines are required to configure, operate, and maintain the engines according to specifications and instructions provided by the engine manufacturer and to maintain records demonstrating compliance. The rule requires CertainTeed to purchase emergency engines certified by manufacturers to meet the applicable emissions standards. The KMEC engines must meet the ultra-low sulfur content standard of 15 ppm. Operation for emergency purposes is not restricted but is restricted to 100 hours per year for non-emergency purposes. The emergency engines must install an hour-meter and track hours of operation in emergency and non-emergency service and keep the associated records as well as records of maintenance.

Compliance with this rule is expected.

15A NCAC 02D .1111: MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY

The proposed facility has potential controlled emissions of total HAP of 46.61, hence the facility is a major source of HAP.

40 CFR 63 Subpart HHHH - National Emission Standards for Hazardous Air Pollutants for Wet-Formed Fiberglass Mat Production

See the discussion of the applicability of this rule with respect to the drying oven in Section IV.B above.

40 CFR Part 63 Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

Subpart ZZZZ applies to owners and operators of stationary RICE at both major and area sources of HAP emissions. Per 40 CFR 63.6590(c)(6), new or reconstructed emergency or limited use stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions must meet the requirements of Subpart ZZZZ by meeting the requirements of 40 CFR Part 60 Subpart IIII or Subpart JJJJ. The proposed emergency diesel-fried fire pump engine has a rating less than 500 BHP. Therefore, CertainTeed will comply with Subpart ZZZZ by complying with the applicable requirements of 40 CFR Part 60 Subpart IIII.

No other MACTs apply to the facility.

15A NCAC 02D .0614: COMPLIANCE ASSURANCE MONITORING (CAM)

02D .0614 implements the federal rule "Compliance Assurance Monitoring" (CAM) at 40 CFR Part 64. The CAM rule requires owners and operators at a facility with a Title V permit to conduct monitoring to provide a reasonable assurance of compliance with applicable requirements. Monitoring focuses on emissions units that rely on pollution control device equipment to achieve compliance with applicable standards. Applicability is addressed at 02D .0614(a), which states:

> (a) General Applicability. Except as set forth in Paragraph (b) of this Rule, the requirements of this Paragraph shall apply to a pollutant-specific emissions unit at a facility required to obtain a permit pursuant to 15A NCAC 02Q .0500 if the unit:
> (1) is subject to an emission limitation or standard for the applicable regulated air pollutant, or a surrogate thereof, other than an emission limitation or standard that is exempt pursuant to Subparagraph (b)(1) of this Rule;
> (2) uses a control device to achieve compliance with any such emission limitation or standard; and
> (3) has potential pre-control device emissions of the applicable regulated air pollutant that are equal to or greater than 100 percent of the amount, in tons per year, required for a source to be classified as a major source. For purposes of this Subparagraph, "potential pre-control device emissions" means the same as "potential to emit" as defined in 15A NCAC 02Q .0103, except that emission reductions achieved by the applicable control device shall not be taken into account.

Note that a pollutant-specific emissions unit (PSEU) is defined in at 40 CFR 64.1 as an emissions unit considered separately with respect to each regulated air pollutant. Also note that TAPs are not considered regulated air pollutants as defined at 40 CFR 64.1 and hence not subject to CAM.

The drying and curing oven is potentially subject to CAM for VOC and HAP as it has pre-controlled PTE for VOC over the TV major source threshold of 100 tpy VOC, over the major source 10 tpy threshold for a single HAP (formaldehyde) and over 25 tpy for total HAP. For VOC, the control device (RTO) is not used to comply with any applicable requirement and therefore does not meet the applicability requirement at15A NCAC 02D .0614(a)(2). For HAP, the control device (RTO) is used only to comply with 40 CFR 63 Subpart HHHH. However, as an "emission limitations or standards proposed by the Administrator of the Environmental Protection Agency after November 15, 1990, pursuant to section 111 or 112 of the federal Clean Air Act", Subpart HHHH meets the CAM exemption at15A NCAC 02D .0614(b)(1)(A). Thus, CAM does not apply to the facility.

15A NCAC 02D .0900 VOLATILE ORGANIC COMPOUNDS (VOCs)
15A NCAC 02D .0902 APPLICABILITY

The 02D .0900 Section of rules applies to sources that emit greater than or equal to 15 pounds of volatile organic compounds per day unless specified otherwise in this Section.

The facility is located in Granville County. Granville County is considered in attainment for all pollutants but is a maintenance area for the 1997 8-hour NAAQS for ozone.

Pursuant to 02Q .0902(e) the following rules apply statewide:

- 15A NCAC 02D .0925, Petroleum Liquid Storage in Fixed Roof Tanks, for fixed roof tanks at gasoline bulk plants and gasoline bulk terminals
- 15A NCAC 02D .0927, Bulk Gasoline Terminals
- 15A NCAC 02D .0928, Gasoline Service Stations Stage I
- 15A NCAC 02D .0932, Gasoline Cargo Tanks and Vapor Collection Systems
- 15A NCAC 02D .0933, Petroleum Liquid Storage in External Floating Roof Tanks, for external floating roof tanks at bulk gasoline plants and bulk gasoline terminals
- 15A NCAC 02D .094 VOC Emissions from Transfer Operations
- 15A NCAC 02D .0949, Storage of Miscellaneous Volatile Organic Compounds

The only rule potentially applicable is **15A NCAC 02D .0949, Storage of Miscellaneous Volatile Organic Compounds.** The facility will potentially store VOCs (e.g., white water mixed with viscosity modifier or dispersant) in tanks with a capacity greater than 50,000 gallons. The rule prohibits storage of VOCs in stationary tanks greater than 50,000 gallons that have a vapor pressure greater than 1.5 psi under actual storage conditions The facility will not store VOCs with vapor pressures at normal storage conditions that exceed the limit set by the rule, as the VOCs added to the white water storage tanks are added in relatively small quantities, resulting in very low vapor pressure. Therefore, the facility will comply with this rule.

Pursuant to 02D .0902(f), (g), and (h), all 02D .0900 rules potentially apply to facilities in the following counties if they meet other certain criteria relating to the facility's status as being located in a moderate nonattainment or maintenance area for the 1997 8-hour ambient air quality standard for ozone and in one of the following areas.

- Cabarrus County
- Gaston County
- Lincoln County
- Mecklenburg County
- Rowan County
- Union County
- Davidson Township and Coddle Creek Township in Iredell County.

As Granville County is not on this list, rule applicability pursuant to 02D .0902(f), (g) and (h) does not apply. In summary, only 02D .0949 applies as discussed above.

State enforceable only
15A NCAC 02Q .0700: TOXIC AIR POLLUTANT PROCEDURES
15A NCAC 02D .1100: CONTROL OF TOXIC AIR POLLUTANTS

The regulations at 15A NCAC 02Q .0700 require, with some exceptions, a permit to emit any toxic air pollutant (TAP) at levels greater than the TAP permitted emission rate (TPER) specified in 15A NCAC 02Q .0711. These regulations include the procedural rules used to comply with the TAP control requirements found at 15A NCAC 02D .1100. 15A NCAC 02D .1104 contains Acceptable Ambient Levels (AALs) for each TAP. Generally, a facility must conduct a dispersion modeling analysis to demonstrate that each TAP emitted above its respective TPER will not result in the respective AAL being exceeded beyond the facility's premises. Collectively, these "toxics" rules are state-enforceable only and are not subject to the TV requirements found at 15A NCAC 02Q .0500.

The Permittee supplied a facility-wide potential emissions estimate for all TAPs and is shown in Section III, Facility Emissions, above. The following table shows for each TAP its potential emission rate as a percentage of the TAPs respective TPER. Anything above 100% requires modeling to assess compliance with the AAL. Hence, only formaldehyde requires further discussion.

		% of TPER		
Pollutant	**CAS No.**	**(lb/yr)**	**(lb/day)**	**(lb/hr)**
1,3-Butadiene	106-99-0	0.25	NA	NA
Acetaldehyde	75-07-0	NA	NA	0.02
Acrolein	107-02-8	NA	NA	0.66
Ammonia	7664-41-7	NA	NA	68.71
Benzene	71-43-2	41.22	NA	NA
Benzo(a)pyrene	50-32-8	0.07	NA	NA
Chlorobenzene	108-90-7	NA	0	NA
Formaldehyde	50-00-0	NA	NA	15,144.37
n-Hexane	110-54-3	NA	27.42	NA
Toluene	108-88-3	NA	0.03	7.42E-03
Xylene	1330-20-7	NA	0.02	2.43E-03

The permittee's modeling approach is discussed in Section 5 of the application. The modeling was reviewed by the Air Quality Analysis Branch (AQAB). The AQAB issued a memo dated March 7, 2023, stating that model indicated compliance with the formaldehyde AAL with a maximum impact of 86% of the AAL.

The following emission rates were included in the modeling demonstration.

Emission Point ID No.*	**Emission Source ID No.**	**Emission Source Description**	**Formaldehyde Emission Limitation (pounds per hour)**
VB	ES-FPL	Fiberglass mat production line emissions from vacuum blowers	1.80
MLFUG	ES-FPL	Fiberglass mat production line fugitive emissions	0.88
RTO1	ES-MDC	Natural gas-fired mat curing and drying oven	3.36
CD-DC1	ES-MFA	Mat finishing area	1.65E-02
RLTANK	I-RT-1 through I-RT-3, I-LT-1, and I-LT-2	Resin and latex tanks	4.46E-04
BLEND	I-BSTT, I-BSET, I-BWT, I-BMT	Blending tanks	1.79E-03
MAU101 through MAU801	I-MAU-101 through I-MAU-801	Ten natural gas-fired makeup air units (0.20 million Btu per hour heat input, each)	1.45E-04
FCU101 through FCU501	I-FCU-101 and I-FCU-501	Two natural gas-fired fan coil units (0.01 million Btu per hour heat input, each)	8.78E-07
AHU601	I-AHU-601	Natural gas-fired air handling unit (0.42 million Btu per hour heat input)	3.05E-05
RTU201	I-RTU-201	Natural gas-fired rooftop unit (0.08 million Btu per hour heat input)	4.44E-05
UH101 through UH802	I-UH-101 through I UH-802	Thirty-four natural gas-fired unit heaters (0.15 million Btu per hour heat input, each)	3.77E-04

The only source of formaldehyde not included in the model was the fire pump. The fire pump is subject to a MACT standard and therefore meets the toxics permitting exemption at 15A NCAC 02Q .0702(a)(27). However, pursuant to 15 A NCAC 02Q .0704(c), sources meeting the exemption set forth in 15A NCAC 02Q .0702(a)(27) shall be reviewed by the Division pursuant to G.S. 143-215.107(a)(5)b. Thus, a determination needs to be made, since the source was not included in the dispersion modeling analysis, if the operation of the fire pump poses an "unacceptable risk to human health." In simple terms, if the inclusion of such a source in a modeling demonstration from which it was excluded would reasonably be expected to contribute to an AAL exceedance, the source would at first pass be considered to pose an "unacceptable risk to human health" and therefore require further analysis, potentially requiring the source to be included in a revised modeling demonstration.

The only TAP of concern for our purposes here is formaldehyde. Note that the TPER analysis above did include emissions of all TAPs emitted from the facility, including the fire pump. The maximum hourly rate of formaldehyde from the fire pump is estimated to be 1.65e-3 lb/hr. Note that formaldehyde has an hourly TPER and therefore is the proper averaging time to consider in this analysis. From Appendix B of the application the facility-wide maximum hourly rate of formaldehyde is 6.06 lb/hr. Thus, the fire pump represents less than 0.04% of the facility-wide total of formaldehyde emissions. Given the small magnitude of these emissions it is not expected that if included in a revised model that that it would affect the conclusion of the current modeling

results. As such, the operation of this fire pump is not expected to result in an "unacceptable risk to human health" pursuant to G.S. 143-215.107(a)(5)b.

The permit will contain the permitted allowable emission rates (i.e., modeled) of formaldehyde on a source-by-source basis with the exception of the drying and curing oven (ID No. ES-MDC). Like the fire pump, it is subject to a MACT standard (MACT HHHH). Since it was included in the modeling demonstration, and the modeling showed compliance with the formaldehyde AAL, it is reasonable to conclude the operation of the drying and curing oven will not result in an "unacceptable risk to human health" pursuant to G.S. 143-215.107(a)(5)b and therefore meets the toxics permitting exemption at 15A NCAC 02Q .0702(a)(27).

The Permittee shall record, retain on site (in written or electronic format) and make available to an authorized representative upon request records sufficient to show that the permitted allowable emission rates are not exceeded. Semiannual reporting will also be required. Compliance is expected with this rule.

State Enforceable Only

15A NCAC 02D .1806: CONTROL AND PROHIBITION OF ODOROUS EMISSIONS

This rule requires that the Permittee shall not operate the facility without implementing management practices or installing and operating odor control equipment sufficient to prevent odorous emissions from the facility from causing or contributing to objectionable odors beyond the facility's boundary.

As the facility has not been constructed the facility has no history with respect to odors. The proposed facility is not expected to cause or contribute to objectionable odors beyond the facility's boundary. However, the Permittee is prepared to implement measures to comply with this regulation should the DAQ make such a determination.

VI. NSPS, NESHAPS, PSD, Attainment Status, 112(r), CAM and Toxics

NSPS
See discussion in Facility-wide Regulatory Considerations in Section V above.

NESHAPS/MACT
CertainTeed is considered a major source of HAP. See discussion in Facility-wide Regulatory Considerations in Section V above.

PSD/Attainment Status
The facility is located in Granville County. Granville County is considered in attainment for all pollutants but is a maintenance area for the 1997 8-hour NAAQS for ozone.

For major stationary sources located in areas designated as attainment with respect to a specific regulated criteria pollutant, the requirements of the PSD program (40 CFR Part 51.166, as incorporated into 15A NCAC 02D .0530) apply. Major stationary sources are those sources with the potential to emit (as defined at 40 CFR 51.166(b)(4)) of 250 tons per year or more of a regulated New Source Review (NSR) pollutant. For sources in the specific categories listed in 40 CFR 51.166(b)(1)(i), the potential to emit threshold is 100 tons per year. Included in this list of sources are "glass fiber processing facilities."

As explained in the application the proposed operation is not considered a "glass fiber processing facility" as the facility will use glass fibers to manufacturer a product but is not engaged in making glass fiber. Therefore, the facility is a "250 tpy source." Since the emissions from the project will not exceed 250 tpy of any regulated NSR pollutant, PSD review does not apply.

Granville County has not triggered the PSD Minor Source Baseline dates for any pollutants.

112r - Risk Management Program (RMP) (15A NCAC 2D .2100)
The Permittee is not subject to Section 112(r) of the Clean Air Act requirements because it does handle any of the regulated substances in quantities above the thresholds in 40 CFR 68.130.

CAM
See discussion in Facility-wide Regulatory Considerations in Section V above.

Toxics
See discussion in Facility-wide Regulatory Considerations in Section V above.

VII. Compliance History

The facility has not been constructed. It has no compliance history.

VIII. Changes Implemented in Revised Permit

This is the first air permit. This section is not applicable.

IX. Public Notice/EPA and Affected State(s) Review

This application is being processed at the Permittee's request pursuant to the "two step" significant modification procedures at 15A NCAC 02Q .0501(b)(2) and 02Q .0504. This application, "step one", is being processed pursuant to 15A NCAC 02Q .0504(a), under the "state only" permitting rules at 15A NCAC 02Q .0300. As such, no public notice or EPA review procedures pursuant to 02Q .0500 apply at this time.

However, this application has met the criteria for enhanced public outreach under the DAQ's Public Participation Plan (PPP) (See the following link: Environmental Justice | NC DEQ). Pursuant to 15A NCAC 02Q .0306(a)(1) "Permits Requiring Public Participation," the Director shall provide public notice for comments with an opportunity for the public to request a public hearing on draft permits for any source that may be designated by the Director based on public interest relevant to air quality.

Therefore, the draft permit for this facility will subject to the public participation procedures at 15A NCAC 02Q .0307 "Public Participation Procedures." Public notice shall be given by publication in a newspaper of general circulation in the area where the facility is located and shall be mailed to persons who are on the Division's mailing list for air quality permit notices and to the

EPA. Consistent with the PPP, this list will be expanded to include the specific addresses of those entities identified in the PPP. The public notice shall include the information required at 15A NCAC 02Q .0307(b). The notice shall allow at least 30 days for public and EPA comments.

X. PE Seal

Pursuant to 15A NCAC 02Q .0112 "Application requiring a Professional Engineering Seal," specifically 02Q .0112(a), a professional engineer's seal (PE Seal) is required to seal technical portions of air permit applications for new sources and modifications of existing sources as defined in 15A NCAC 02Q .0103 that involve:

(1) design;
(2) determination of applicability and appropriateness; or
(3) determination and interpretation of performance of air pollution capture and control systems.

A Form D5 (Technical Analysis to Support Permit Application) was submitted with the application sealed by Nicole Saniti, PE, license no.038716.

XI. Zoning

A zoning consistency determination is required pursuant to 15A NCAC 02Q .0304(b) if the air permit application involves a new facility or the expansion of an existing facility. A determination was received with application signed by the City of Oxford's Planning Director stating that the "proposed operation is consistent with applicable zoning ordinances."

XII. Recommendations

This permit application has been reviewed by NC DAQ to determine compliance with all procedures and requirements. NC DAQ has determined that this facility appears to be complying with all applicable requirements.

The Raleigh Regional Office has received a copy of this permit and had no comments.

Recommend Issuance of Permit No. 10773R00.