NORTH CAROLINA DIVISION OF AIR QUALITY

Air Permit Review

Permit Issue Date:

Region: Raleigh Regional Office
County: Granville
NC Facility ID: 3900040
Inspector's Name: Steve Hall
Date of Last Inspection: 03/05/2008
Compliance Code: 3 / In Compliance - Inspection

Facility Data

Applicant (Facility's Name): CertainTeed Corporation

Facility Address:
CertainTeed Corporation
200 CertainTeed Road
Oxford, NC 27565

SIC: 2952 / Asphalt Felts And Coatings
NAICS: 324122 / Asphalt Shingle and Coating Materials Manufacturing

Facility Classification: Before: Title V **After:** Title V
Fee Classification: Before: Title V **After:** Title V

Permit Applicability (this application only)

SIP:
NSPS:
NESHAP:
PSD:
PSD Avoidance:
NC Toxics:
112(r):
Other:

Contact Data

Facility Contact	Authorized Contact	Technical Contact
Robert Yurek Environmental Coordinator (919) 693-1141 200 Certainteed Road Oxford, NC 27565	Mark Heilman Plant Manager (919) 693-1141 200 Certainteed Road Oxford, NC 27565	Neil Gresham Environmental Coordinator (919) 693-1141 200 Certainteed Road Oxford, NC 27565

Application Data

Application Number: 3900040.08E
Date Received: 12/04/2008
Application Type: Renewal
Application Schedule: TV-Renewal

Existing Permit Data
Existing Permit Number: 03663/T25
Existing Permit Issue Date: 03/24/2009
Existing Permit Expiration Date: 09/30/2010

Review Engineer: Gautam Patnaik

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

Comments / Recommendations:
Issue 03663/T26
Permit Issue Date:
Permit Expiration Date:

1. Facility Description.

CertainTeed Corporation at their Oxford, Granville County facility primarily manufactures asphalt roofing shingles from glassmat, asphalt, color granules, sand, limestone, and headlap granules, using various processes. These raw materials are combined to produce asphalt shingles. As per the Regional Office this facility started limited production of polypropylene shingles as a separate process in December 2007. This process involves extruding and molding polypropylene to form a high-end, durable roofing shingle.

2. Purpose of Application

This application is for the renewal for their Title V permit. The current Air Permit No. 03663T25, is scheduled to expire on June 30, 2009. The applicant submitted their application for renewal on 12/04/2008, however this submittal was not prior to nine months prior to the expiration date and are

therefore the facility is not covered under the Title V application shield pursuant to 15A NCAC 2Q .0512(b)(1). On December 1, 2008 this facility received a NOV for not submitting a renewal application on time.

As part of the renewal application the applicant also requested the removal of the 800 gallon laminate day tank for Line No.1 (ID No. ESMA7) and the 800 gallon sealant day tank for Line No.1 (ID No. ESMA9) from the permit. These sources were removed and all references to these sources removed from the new permit.

3. Application Chronology

This renewal application was received on 12/04/2008. The table below outlines the modifications to their permit starting from their current title V permit (Based on documents on IBEAM) to their initial title V permit.

Application #	Changes Made to the Permit	Permit Issued
3900040.08D	Addition of new laminate and sealant application and storage equipment on an existing roofing line (line No. 1) and several other sources at this facility. Administrative changes	03663T25
3900040.08C	Administrative changes (consolidated with 3900040.08D)	
3900040.08B	Construction notice	
3900040.08A	Installation of two asphalt flux storage tanks and few other sources and some administrative changes.	03663T24
3900040.07C	Installation and operation of a polypropylene roofing product manufacturing operation including as many as 10 pairs of extruders.	03663T23
3900040.07B	Modification and configuration of various control devices at the Laminate Asphalt Roofing Line No. 3. Addition of mist eliminator and several changes to existing control devices.	03663T22
3900040.05C	Administrative changes.	03663T21
3900040.05B	To install the third asphalt roofing line, including the installation of two regenerative thermal oxidizers and various modifications to the material handling operations.	03663T20
3900040.05A	Route uncontrolled emissions from several emission sources to an existing ESP/Mist Eliminator for MACT compliance.	03663T19
3900040.04B	Addition of emergency generator and changes to monitoring conditions.	03663T18
3900040.04A	First time title V permit.	03663T17

4. Regulatory Review

The facility is subject to the following regulations:

i. 15A NCAC 2D .0515: “Particulates from Miscellaneous Industrial Processes.”

ii. 15A NCAC 2D .0521: "control of visible emissions"

iii. 15A NCAC 2D .0524: "NSPS for Asphalt Processing and Asphalt Roofing Manufacture" (40 CFR 60, Subpart UU)

iv. 15A NCAC 2D .0516: "Sulfur Dioxide Emissions from Combustion Sources."

v. 5A NCAC 2D.0503: "Particulates from Fuel Burning Indirect Heat Exchangers"

vi. 15A NCAC 02D .0524: "NSPS 40 CFR Part 60 Subpart Dc"

vii. 15A NCAC 2D .1111: "Maximum Achievable Control Technology (MACT) – 40 CFR Part 63 Subpart ZZZZ (Reciprocating Internal Combustion Engines)"

State-Enforceable Only

viii. 15A NCAC 2D .1100: "toxic air pollutant emissions limitations"

State-Enforceable Only

ix. 15A NCAC 2Q .0705: "Existing Facilities and SIC calls"

x. 15A NCAC 2D .0958: "Work Practices for Sources of Volatile Organic Compounds"

xi. 15A NCAC 2D .1111: "Maximum Achievable Control Technology (MACT)" 40 CFR Part 63 Subpart LLLLL (Asphalt Processing and Asphalt Roofing Manufacturing)

xii. 15A NCAC 2Q .0317 (PSD Avoidance for SO_2, NO_x, and VOCs)

Renewal of the permit does not change any stipulations for the above regulations. The review of these regulations is abbreviated because the facility was, based on information available to the DAQ at this time, determined to be in compliance for all the above regulations during the recent comprehensive review of applications 3900040.08A and 3900040.08D resulting in issuance of Air Quality Permit Nos. 03663T24 and 03663T25 respectively. The recent violations have been discussed in past reviews of applications and no changes were made to the emissions limits, testing, monitoring, record keeping, and reporting requirement of the above regulations.

xii. 15A NCAC 2D .0614: "Compliance Assurance Monitoring." Addressed below:

5. NESHAPS, PSD/NSR, Attainment Status, Toxics, 112(r), CAM, Last MACT/Air Toxics Demonstration

PSDNSR

This facility is located in Granville County, which is in attainment for all pollutants. The facility is an existing major source under both the PSD program (15A NCAC 2D .0530) and the non-attainment NSR program (15A NCAC 2D .0531) since the County was in non-attainment for ozone at one time.

Attainment Status

This facility is located in Granville County, which is in attainment for all criteria pollutants.

NESHAP/MACT

The facility is subject to the Asphalt Processing and Asphalt Roofing Manufacturing (Subpart LLLLL) MACT.

112(r)

This facility is not subject to Section 112(r) of the Clean Air Act requirements because it does not store the regulated substances in quantities above the thresholds in the Rule.

Air Toxics

This renewal does not subject the facility to any toxic review.

2Q .0705/Last MACT

As per the current permit the facility has since 4/19/2005 been in compliance with 15A NCAC 2Q .0705.

CAM

The Compliance Assurance Monitoring (CAM) Rule (40 CFR Part 64) applies to pollutant-specific emissions units (PSEU) that are pre-control major sources and use a control device to comply with an emissions limit.

To be subject to CAM a source must be subject to an emission limit and uses a control device to achieve compliance with this limit and the before control emissions from this source are greater than 100 tons per year of any criteria pollutant or more than 10 tons per year of any HAPs or more than 25 tons per year for a combined emissions of HAPs.

The afterburner (CDAFB), electrostatic precipitator (CDESP), mist eliminator (CDME), and the regenerative thermal oxidizer (CDRTO) control the emissions from the sources ESBS1, ESBS2, ESBS3, ESHM1, ESHM3, and ESLC3. The applicant has determined that all these sources are subject particulate matter emissions standard and that the before controls emissions of particulate matter from each of the sources are above 100 tons per year. The facility has historically assumed that all the emissions of particulate matter from the facility are all PM_{10}. Thus all the control devices controlling the emissions of particulate matter from these sources are subject to a (CAM) plan as per the requirement of 2D .0614.

As per 40 CFR § 64.3 ‘Monitoring design criteria.’ “Indicators of performance may include, but are not limited to, direct or predicted emissions (including visible emissions or opacity), process and control device parameters that affect control device (and capture system) efficiency or emission rates, or

recorded findings of inspection and maintenance activities conducted by the owner or operator." The applicant has selected to monitor combustion temperature of control devices (ID Nos. CDAFB and CDRTO) and the pressure drop for the electrostatic precipitator (CDESP) and mist eliminator (CDME).

Testing

i. None.

Monitoring

`ii. The applicant has proposed to use many of the monitoring parameters and requirements of the existing Asphalt Processing and Asphalt Roofing Manufacturing (Subpart LLLLL) MACT as outlined in Section 2.2 i. 1., of the permit.

The key element of the monitoring approach are presented in the table below:

Indicator [64.6(c)(1)(i)]	**Combustion temperature for CDAFB and CDRTO**	**Pressure Drop for CDESP and CDME**
Measurement Approach [64.6(c)(1)(ii)]	Temperatures are indicated by a continuous monitoring systems (CMS) as per requirements of 2.2 i. 1. o., of this permit.	Pressure is indicated by a continuous monitoring systems (CMS) as per requirements of 2.2 i. 1. k., of this permit for (CDESP) and as per requirements of 2.2 i. 1. l., of this permit for (CDME)
Indicator Range [64.6(c)(2)]	An excursion is defined as a 3-hour block average value of: 1) at or above 1,565 degrees Fahrenheit for (ID No. CDAFB) and 2) at or above 1,590 degrees Fahrenheit for (ID No. CDRTO), as per requirements of 2.2 i. 1. o., of this permit.	An excursion is defined as a 3-hour block average value of: 1) at or below 0.9 inches of H_2O for (CDESP) and 1) at or below 19.6 inches of H_2O for (CDME) as per requirements of 2.2 i. 1. k., and 2.2 i. 1. l., of this permit.
Quality Improvement Plan (QIP) Threshold [64.8]	Six excursion, as defined above, within any 6-month period.	Six excursion, as defined above, within any 6-month period.
QA/QC Practices and Criteria [64.3(b)(3)]	The CMS are calibrated as per the requirements of 2.2 i. 1. r., of this permit.	The CMS are calibrated as per the requirements of 2.2 i. 1. p., of this permit

Recordkeeping and Reporting

iii. The applicant must meet monitoring, recordkeeping and reporting requirements as specified in 40 CFR 64.7 through CFR 64.9

The Permittee must maintain the following records on a monthly basis in accordance with the requirements of 40 CFR 63.10(b)(1). A semi annual compliance report must cover the semiannual

reporting period from January 1 through June 30 and the semiannual reporting period from July 1 through December 31.

6. Unshielded Sources.

The current permit does not have a Part II. However, there were many emission sources modified during the five year permit term that were flagged in the permit as not being shielded in accordance with General Condition R. These references were taken out since this permit will provide for a 30-day public comment period and 45-day EPA review period.

7. Statement of Compliance, Emissions summary, Application Processing Schedule.

There is no change in emissions for this renewal. Mr. Steve Hall of the Regional Office in his latest inspection done on 03/05/2008 (on IBEAM) stated "based on observations made during the March 5, 2008 inspection, CertainTeed was found to be in violation of the requirements of General Condition F of their Title V permit by not properly operating and maintaining the plant's emissions sources and control equipment at all times in a manner that will effect an overall reduction in air pollution. Additionally, the company reported NSPS and MACT testing violations in their 2007 annual compliance certification." All these issues have been discussed in the comprehensive review of applications 3900040.08A and 3900040.08D. The latest NOV issued on December 1, 2008 is for not submitting a permit renewal on time. The applicant has since submitted their application for the renewal of their title V permit.

Normally the applicant and the Regional Office are given a copy of the draft and their comments are incorporated before a renewal application is subject to a public notice and EPA review. Due to the fact that the applicant submitted their renewal application late, the applicant and Regional Office review and the public notice/EPA review will be done simultaneously. This expedited effort is to ensure that the applicant get their renewed permit before the current permit expires.

9. Public Notice / EPA and Affected State Review

Pursuant to 2Q. 0521, a notice of the draft Title V Permit was [will be] placed in a newspaper of general circulation in the area where the facility is located. The notice did provide for a 30 day comment period, with an opportunity for a public hearing. Copies of the public notice was [will be] sent to persons on the Title V mailing list and EPA. Pursuant to 2Q .0522, a copy of each permit application, each proposed permit and each final permit pursuant was [will be] provided to EPA. Also pursuant to 2Q .0522, a notice of the draft Title V Permit was [will be] provided to each affected State at or before the time notice provided to the public under 2Q .0521 above.

10. Conclusions, Comments, and Recommendations

A professional engineer's seal was not required for this renewal.

A consistency determination was not required for this renewal.

Regional Office and the applicant were provided a draft of this permit for their comments and there comments were addressed.

11. Permit Modification/Changes

The following table describes the modifications to the current permit as part of the modification process.

Page(s)	Section	Description of Change(s)
		Removal of sources (ID Nos. ESMA7 and ESMA9)
48 to 49	2.3	CAM plan for afterburner (CDAFB), electrostatic precipitator (CDESP), mist eliminator (CDME), and regenerative thermal oxidizer (CDRTO)
49 to 58	General Conditions	Updated