

## Application Review

**Issue Date:** xx/xx/2020

**Region:** Raleigh Regional Office  
**County:** Person  
**NC Facility ID:** 7300061  
**Inspector's Name:** Matthew Mahler  
**Date of Last Inspection:** 01/29/2020  
**Compliance Code:** 3 / Compliance - inspection

<p style="text-align: center;"><b>Facility Data</b></p> <p><b>Applicant (Facility's Name):</b> Louisiana-Pacific Corporation - Roxboro</p> <p><b>Facility Address:</b>          Louisiana-Pacific Corporation - Roxboro          10475 Boston Road          Roxboro, NC 27574</p> <p><b>SIC:</b> 2493 / Reconstituted Wood Products  <b>NAICS:</b> 321219 / Reconstituted Wood Product Manufacturing</p> <p><b>Facility Classification: Before:</b> Title V <b>After:</b> Title V  <b>Fee Classification: Before:</b> Title V <b>After:</b> Title V</p>	<p style="text-align: center;"><b>Permit Applicability (this application only)</b></p> <p><b>SIP:</b> 15A NCAC 02D .0515, 02D .0516: 02D .0521, 02D .1100, 02D .1806, 02D .0530 and 02D .0902  <b>NSPS:</b> Subpart IIII and Subpart Dc  <b>NESHAP:</b> Subpart DDDD, Subpart ZZZZ Subpart QQQQ and Subpart DDDDD  <b>PSD:</b> 02D .0530  <b>PSD Avoidance:</b> NA  <b>NC Toxics:</b> 02D .1100, (NCGS) 143-215.107(a)(5) (House Bill 952)  <b>112(r):</b> NA  <b>Other:</b> 40 CFR §81.334, (CAM) Rule (40 CFR Part 64), 15A NCAC 02Q .0504, 02Q .0501(c) &amp; (c) (1), 02Q .0516, 02Q .0501(g), 02Q .0300 and 02Q .0306</p>
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Contact Data			Application Data
<p style="text-align: center;"><b>Facility Contact</b></p> <p>Ross Reed          Plant Environmental Manager          (336) 503-3166          10475 Boston Road          Roxboro, NC 27573</p>	<p style="text-align: center;"><b>Authorized Contact</b></p> <p>Michael Sarder          Plant Manager          (336) 503-3162          10475 Boston Road          Roxboro, NC 27573</p>	<p style="text-align: center;"><b>Technical Contact</b></p> <p>Ross Reed          Plant Environmental Manager          (336) 503-3166          10475 Boston Road          Roxboro, NC 27573</p>	<p><b>Application Number:</b> 7300061.20B  <b>Date Received:</b> 09/08/2020  <b>Application Type:</b> Modification  <b>Application Schedule:</b> TV-Significant  <b>Existing Permit Data</b>  <b>Existing Permit Number:</b> 07760/T23  <b>Existing Permit Issue Date:</b> 10/01/2019  <b>Existing Permit Expiration Date:</b> 05/31/2021</p>

<b>Total Actual emissions in TONS/YEAR:</b>							
CY	SO2	NOX	VOC	CO	PM10	Total HAP	Largest HAP
2018	13.06	137.72	133.58	103.40	66.10	61.63	29.57 [Methanol (methyl alcohol)]
2017	9.99	157.48	127.53	137.37	42.93	59.77	28.59 [Methanol (methyl alcohol)]
2016	8.97	146.45	126.39	122.35	40.95	57.91	27.69 [Methanol (methyl alcohol)]
2015	8.58	141.70	119.93	115.70	39.69	55.11	25.98 [Methanol (methyl alcohol)]
2014	9.11	120.39	121.60	84.81	38.02	53.18	24.91 [Methanol (methyl alcohol)]

<p><b>Review Engineer:</b> Gautam Patnaik</p> <p><b>Review Engineer's Signature:</b> _____ <b>Date:</b> xx/xx/2020</p>	<p style="text-align: center;"><b>Comments / Recommendations:</b></p> <p><b>Issue</b> 07760/T24  <b>Permit Issue Date:</b> xx/xx/2020  <b>Permit Expiration Date:</b> May 31, 2021</p>
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## I. Facility Description

This facility located in Roxboro, NC, manufactures oriented strand board (OSB) panels, engineered wood sidings, composite decking and decorative interior moldings. The process heat at the facility is supplied by burning wood products in indirect-fired heat exchangers. Combustion emissions are controlled by cyclones, precipitators, and regenerative thermal oxidizers (RTOs).

## II. Purpose of Application

The current permit for this facility is Air Quality Permit No. 07760T23 which was issued on October 1, 2019. The application associated with this permit requested the replacement of five existing triple-pass wafer dryers (ID Nos. D1 through D5) with new dryers that are single-pass wafer dryers (ID Nos. D1-A through D5-A). The new dryers are rated each at 17.7 oven-dried tons of wafer per hour (ODT/hr) resulting in an 18.1% production increase for each dryer.

Each of these new dryers will be controlled in series by a cyclone, two wet electrostatic precipitators and finally by three propane/natural gas-fired regenerative thermal oxidizers (ID. Nos RTO-4, RTO-5 and RTO-6).

Section 2.2 B. 1 c. i., of the current permit requires periodic testing of the oxidizers to be conducted within 60 months after the previous test.

Section 2.2 B. 1 q. ii., of the current permit requires that once any one of the new dryers (ID Nos. D-1A through D-5A) are installed, the facility shall perform testing to determine the emissions factors for the emissions of carbon monoxide (CO), nitrogen oxides (NO<sub>x</sub>), particulate matter (PM), PM-10 and volatile organic compounds (VOC) as per scenarios outlined in the following tables under Section 2.2 B. 1. of the permit, and as per Section iii. of the permit. The facility shall perform testing of the dryer system within 180 days of installation of **each of the new dryers** (ID Nos. D-1A through D-5A) with protocols approved by DAQ.

This application is a request by the facility to test all the new dryers (ID Nos. D-1A through D-5A) with protocols approved by NCDAQ Stationary Source Compliance Branch (SSCB) within 180 days of **installation of all the new dryers (ID Nos. D-1A through D-5A)**

The applicant stated “Due to the nature of dryer operation and control device configuration for ES BARK1, it is not practicable to perform the stack testing on each new Dryer as they are installed (permit conditions 2.2.B.1.q.ii and iii). This would require a major upset to production, as well as major additional expense to the facility. The new Dryers will be installed over a period of three years, which will fall within the 60-month testing frequency for the existing Dryers (permit condition 2.2.B.1.c). LP Roxboro requests that this source testing requirement be amended to require stack testing of all five new Dryers within 180 days of installation and operation of the final new Dryer.”

On 9/18/2020, an internal DAQ meeting was held and attended by Dena Pittman, Supervisor of the Raleigh Regional office, Gary Saunders, Supervisor of the NCDAQ Stationary Source Compliance Branch (SSCB), Booker Pullen and Mark Cuilla, Supervisors of the NCDAQ Permit Section, to discuss issues regarding compliance, testing, timing and permit. It was decided to approve the

applicant's request to test all the new dryers (ID Nos. D-1A through D-5A) within 180 days of **installation of all the new dryers** (ID Nos. D-1A through D-5A).

### III. Regulatory Summary

A. The emissions from the new single-pass wafer dryers (ID Nos. D1-A through D5-A) are subject to the following regulations:

1. 15A NCAC 2D .0515: "Particulates from Miscellaneous Industrial Processes;"
2. 15A NCAC 02D .0516: "Sulfur dioxide Emissions from Combustion Sources;"
3. 15A NCAC 02D .0521: "Control of Visible Emissions;"

State-Enforceable Only

4. 15A NCAC 02D .1100: "Toxic Air Pollutant Emissions Limitations;"

State-Enforceable Only

5. 15A NCAC 02D .1806: "Control and Prohibition of Odorous Emissions;" and
6. 15A NCAC 02D .0530: "Prevention of Significant Deterioration (PSD)."

There are no changes to the regulations listed above due to the testing changes for the new dryers (ID Nos. D-1A through D-5A). Also, until the emissions factors for the new dryers (ID Nos. D-1A through D-5A) have been incorporated into this permit, the applicant shall for each of the new dryers (ID Nos. D-1A through D-5A) use the corresponding existing dryers (ID Nos. D-1 through D-5) emission factors (See Section 2.2 B. 1. q. vi., of the permit). The actual emissions from the new dryers shall be reported at 18.1% higher than the corresponding existing dryer (See Section 2.2 B. 1. q. vii., of the permit).

### IV. NSPS, NESHAPS/MACT, PSD, Attainment Status, 112(r), CAM, (NCGS) 143-215.107(a)(5) (House Bill 952), Compliance Status, and Application Processing Schedule:

#### NSPS

Sources at this facility subject to NSPS Subpart IIII and Subpart Dc are not affected by the change in testing schedule for the new dryers (ID Nos. D-1A through D-5A).

#### NESHAP/MACT

Sources at this facility subject to the MACT Subpart DDDD, Subpart ZZZZ Subpart QQQQ and Subpart DDDDD are not affected by the change in testing schedule for the new dryers (ID Nos. D-1A through D-5A).

### Attainment Status

This facility is located in Person County, which is in attainment according to 15A NCAC 02D .0902 and 40 CFR §81.334 “Designation of Areas for Air Quality Planning Purposes.”

### 112(r)

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

### Compliance with (NCGS) 143-215.107(a)(5) (House Bill 952)

The change in testing schedule for the new dryers (ID Nos. D-1A through D-5A) would not cause any increase in emissions of TAPs and not present an unacceptable risk to human health thus, complying with North Carolina General Statute (NCGS) 143-215.107(a)(5) (House Bill 952).

### CAM

There are sources at this facility subject to Compliance Assurance Monitoring (CAM) Rule (40 CFR Part 64). The change in testing schedule for the new dryers will not affect any conditions to this rule.

### Compliance Status

A March 12, 2020 testing report approved protocols for testing of BARK1 drying process for emissions of carbon monoxide (CO), nitrogen oxides (NOx), particulate matter (PM) and volatile organic compounds (VOC).

As per the latest inspection done on 1/29/2020 (on IBEAM) by Mr. Matthew Mahler of the Raleigh Regional Office, he states that “based on observations made during the January 29, 2020 inspection, this facility appears to be in compliance with their air quality requirements.”

### Application Processing Schedule

The “two-step” method (as per 15A NCAC 02Q .0504) where the facility submits the required Title V application within one year of commencement of operation of the project, is not possible since the testing requirements to test all the new dryers (ID Nos. D-1A through D-5A) with protocols approved by NCDAQ Stationary Source Compliance Branch (SSCB) within 180 days of installation of **all the new dryers** (ID Nos. D-1A through D-5A) (Section 2.2 B. 1. q. iii., of the modified permit) contravenes the existing permit requirement in Section 2.2 B. 1. q. iii., of the current permit which requires the facility shall perform testing of the dryer system within 180 days of installation of **each** of the new dryers (ID Nos. D-1A through D-5A) with protocols approved by DAQ.

This application is being processed under 15A NCAC 02Q .0501(c)(1) (One Step Significant) which is for significant modification pursuant to 15A NCAC 02Q .0516 for conditions that would contravene or conflict with a condition in the existing permit requiring a construction and operation permit following the procedures set forth in this Section (15A NCAC 02Q .0501).

As per 15A NCAC 02Q .0501(g) if the owner or operator of a facility subject to the requirements of this Section submits an application for a revision to his permit before receiving the initial permit pursuant to this Section, the application for the revision shall be processed pursuant to 15A NCAC 02Q .0300.

Section 15A NCAC 02Q .0306 requires “the Director shall provide public notice for comments with an opportunity for the public to request a public hearing on draft permits.” Thus, this application will be subject to 30-day public notice and 45-day EPA review.

## **V. Consistency Determination, Professional Engineer Seal, Increments, Comments, and Recommendations**

### Consistency Determination

A zoning consistency determination (G.S. 143-215.108) was not required since the sources were not modified or new sources added.

### Professional Engineer Seal

As required by 15A NCAC 02Q .0112 “Applications Requiring Professional Engineer (PE) Seal,” a professional engineer registered in North Carolina shall be required to seal technical portions of air permit applications for new sources and modifications of existing sources of particulate matter with air flow rates of more than 10,000 actual cubic feet per minute (acfm).

A PE seal (15A NCAC 02Q .0112) was not required since none of the control devices were being modified or replaced, nor does the change in testing schedule for the new dryers require a redesign or determination of the adequacy of the current control system.

### Increments

As per <http://daq.state.nc.us/permits/psd/docs/mbd1.pdf> the PSD minor baseline dates for the emissions of PM<sub>10</sub> and SO<sub>2</sub> have been triggered for Person County.

The change in testing schedule for the new dryers does not cause an emissions increase from the facility.

### Comments and Recommendations

The facility currently has a renewal application (Application # 7300061.20A) in house.

The Regional Office, the applicant and the SSCB (Stationary Source Compliance Branch) were provided a copy of the modified draft permit for this application for their comments and their comments were taken into account.

The applicant’s comments received on 10/1/2020 were minor and taken into account.

The Regional Office comments received on 10/6/2020 stated  
“Here's a few items found from the review of the Draft docs.  
draft Permit Review:

on page 3, change 12(r) to 112(r)

draft Permit:

on page 3-4, Permitted Equipment List, Control Device Description column - remove 'each' from the  
"One cyclone...." description for D-1A through D-5A;

on page 27, Footnote #2 - change July 18-19, 2018 to July 18-20, 2017; and

on page 39, in Table - change dryers to dryer (for each column entry).”

All of the above changes were made in the permit and review.

The SSCB had some issues regarding continuous CAM monitoring. There was concerns that any delay of the issuance of this permit might affect the facility’s testing compliance, it was agreed to have these CAM concerns addressed during their renewal (Application # 7300061.20A) in house.

## VI. Table of Changes

Page(s)	Source ID	Description of Change(s)
	Cover letter	Updated facility name and Responsible Officer title
	Insignificant Activities list	There were no changes to the insignificant activities list
1	Permit	Updated facility name
6	summary of all permitted emission sources and associated air pollution control devices table	The foot note under this table requiring sources (ID Nos. D-1A through D-5A) shall file a Title V Air Quality Permit Application on or before 12 months after commencing operation is not removed
39	2.2 B. 1. q. iii.,	Test all the new dryers (ID Nos. D-1A through D-5A) within 180 days of installation of all the new dryers (ID Nos. D-1A through D-5A).
52 to 61	General Conditions	Updated