

**NORTH CAROLINA DIVISION OF
AIR QUALITY**

Air Permit Review

Permit Issue Date: 02/22/2011


Region: Fayetteville Regional Office
County: Scotland
NC Facility ID: 8300104
Inspector's Name: Robert Hayden
Date of Last Inspection: 09/14/2010
Compliance Code: 3 / Compliance - inspection

Facility Data		
Applicant (Facility's Name): Natures Earth Pellets NC, LLC		
Facility Address: Natures Earth Pellets NC, LLC 16900 Aberdeen Road Laurinburg, NC 28352		
SIC: 2499 / Wood Products, Nec NAICS: 321999 / All Other Miscellaneous Wood Product Manufacturing		
Facility Classification: Before: Synthetic Minor After: Synthetic Minor		
Fee Classification: Before: Synthetic Minor After: Synthetic Minor		

Permit Applicability (this application only)
SIP:
NSPS:
NESHAP:
PSD:
PSD Avoidance:
NC Toxics:
112(r):
Other:
ADMIN MODIFICATION

Contact Data		
Facility Contact	Authorized Contact	Technical Contact
Cliff Bragg Plant Manager (304) 642-1156 16900 Aberdeen Road Laurinburg, NC 28352	Cliff Bragg Plant Manager (304) 642-1156 16900 Aberdeen Road Laurinburg, NC 28352	Cliff Bragg Plant Manager (304) 642-1156 16900 Aberdeen Road Laurinburg, NC 28352

Application Data
Application Number: 8300104.11A
Date Received: 02/11/2011
Application Type: Admin. Amendment
Application Schedule: State
Existing Permit Data
Existing Permit Number: 10012/R00
Existing Permit Issue Date: 11/12/2009
Existing Permit Expiration Date: 10/31/2014

Review Engineer: Gregory Reeves
Review Engineer's Signature: 
Date: 02/22/2011

Comments / Recommendations:
Issue 10012/R01
Permit Issue Date: 02/22/2011
Permit Expiration Date: 10/31/2014

1. Purpose of Application:

Natures Earth Pellets NC, LLC is an existing facility in Laurinburg, Scotland County. The facility utilizes virgin wood chips to produce wood pellets for use in residential and small commercial pellet heating stoves.

The facility is requesting an administrative modification to their air permit to clarify the restrictions for plant throughput. See section 4 below for details.

The facility is synthetic minor for PM10, NOx, and VOC from the direct wood-fired dryer, and complies with the synthetic minor limits by limiting throughput to no more than 141,450 tons per 12 month period.

The application did not contain any confidential information.

The facility contact for the permit application is Clifford Bragg, Plant Manager (910-291-0041).

2. Facility Description:

Natures Earth Pellets uses wood chips and sawdust from several sawmills in the state to produce wood pellets that are used in residential and small commercial wood-burning stoves. The wood feed is dried to less than 13% moisture as needed in a direct wood-fired rotary dryer that is fueled by dust and fines from the transfer operations within the plant. The wood chips are sent to hammer mills for size reduction, then to pellet extruders where the material is steamed and sent through pellet mills where the wood is extruded into cylindrical pellets. The pellets are aspirated to remove dust and fines, cooled, then bagged for shipment to customers.

3. Zoning:

A zoning consistency determination is not required for this application, as no equipment is being added or modified, and emissions are not increasing as a result of the application.

4. Application Chronology:

- 02/11/11 The completed air permit application was received at FRO. No fees were included, as this is an administrative modification.
- 02/14/11 Greg Reeves contacted Cliff Bragg to discuss the reasons for the application, and to discuss the various areas of the permit which might need to be modified.

5. Changes in Equipment, Emissions, and Regulations:

- Natures Earth Pellets is requesting that the wording of Specific Conditions and Limitations No. A(12)(a)(1) of the permit be changed from the existing "The amount of wood pellet production at the facility shall not exceed 141,450 tons per 12-month period." to "The amount of direct wood-fired rotary dryer production at the facility shall not exceed 141,500 tons per 12-month period."

FRO agrees that the wording of this stipulation should be changed. The original permit application included toxic air pollutant emissions calculations and a toxics air dispersion modeling analysis using dryer throughput, not pellet production. Not all of the wood fed to the pellet system passes through the dryer system. The portion that does not pass through the dryer does not contribute to the toxics emissions and should not be included in the permit limitation.

- While not specifically requested by the facility, FRO believes that several other permit stipulations have similar wording that would need to change to meet the intent of the permit. These include stipulation Nos. A(12)(a)(1), A(12)(a)(1), A(12)(b)(1), A(12)(b)(1), A(12)(c)(1), A(14)(a)(1), A(14)(b)(1), and A(14)(c)(1). In each of these stipulations, the wording "...wood pellet production..." should be changed to read "...direct wood-fired rotary dryer production..."*
- An Initial Startup Notification is required under stipulation A(3). This notification was received on October 14, 2010, stating a startup date of July 10, 2009 for the dryer and December 24, 2009 for the plant. Since notification has been received, this stipulation will be removed from the permit.*
- The Truck Dump operation (ID No. TD-1), Drag Conveyor No. 1 (ID No. DC-1), and Drag Conveyor No. 2 (ID No. DC-2) are incorrectly described as having a capacity of 300,000 tons per hour. These should all be corrected to 300,000 pounds per hour, or 150 tons per hour.*
- A typographic error in the description for Hammer Mill Operation (ID No. HM-4) will be corrected in this revision.*

6. Emission Sources

No changes are being made in the existing emission source table.

7. NSPS, NESHAP, PSD, Attainment Status, and 112(r)

- **NSPS** – The facility is not subject to any current NSPS regulations. The facility is not subject to Subpart CCCC “Commercial and Industrial Solid Waste Incineration Units for Which Construction is Commenced After November 30, 1999 or for Which Modification or Reconstruction is Commenced After June 1, 2001” because it has been determined that the wood shavings and sawdust used as the plant feedstock is not a solid waste (see the Solid Waste Determination letter dated 11/10/09 from Don van der Vaart).
- **NESHAP** – The facility is not subject to any current NESHAP regulations.
- **PSD** – PSD does not impact this application.
- **Attainment Status** – Scotland County is in attainment for ozone and PM_{2.5}.
- **112(r)** – The facility is not subject to 112(r). None of the listed toxic chemicals are stored in quantities above the threshold quantities. The facility is therefore not required to maintain a risk management plan.

8. Hazardous and Toxic Air Pollutants (HAP and TAP):

No HAP or TAP analysis has been conducted with this permit application, as emissions are unchanged by the modifications to the permit as a result of this application.

9. Facility Compliance History:

- 09/30/10 NOV issued to the facility for failure to maintain I & M records for control devices, and failure to maintain records of plant throughput to demonstrate compliance with Synthetic Minor and Toxics permit limitations. Calculations were not performed to demonstrate compliance with synthetic Minor limitations for PM₁₀, NO_x, and CO. Also cited for no initial startup notification.

10. Facility Emissions / Stipulations Review:

No review of emissions or permit stipulations has been conducted, as emissions will be unchanged by this permit application and no permit stipulations will be added or removed. See section 5 above "Changes in Equipment, Emissions, and Regulations" for wording changes in some stipulations. See the previous R00 permit review dated 11/12/09 for details on facility emissions.

11. Conclusion, Comments, and Recommendations

- I recommend that air permit 10012R01 be issued to Natures Earth Pellets NC, LLC
- Modifications to IBEAM:
- Adjusted column widths, bolded and shaded throughout to improve appearance


Review Engineer



Date

02/16/2011

Permit Coordinator



Date

2/17/2011

DAQ Supervisor



Date

2-22-11

/GWR

Cc: FRO Files

Comprehensive Application Report for 8300104.11A

Natures Earth Pellets NC, LLC - Laurinburg (8300104)

Scotland County

02/23/2011

General Information: Permit/Latest Revision: 10012/ R01

Permit code: State

Application type: Admin. Amendment

Engineer/Rev. location: Gregory Reeves/FRO

Regional Contact: Gregory Reeves

Facility location: Fayetteville Regional Office

Facility classification: Synthetic Minor

Clock is ON: Application is COMPLETE

Status is: Issued

Application Dates

Received: 02/11/2011
 Completeness Due: 03/28/2011
 Clock Start: 02/11/2011
 Calculated Issue Due: 05/12/2011

Fee Information

Initial amount: Date received: 02/11/2011
 Amount Due: Add Amt Rcv'd: Date Rcv'd:

Fund type: Deposit Slip #: 2331
 Location rec'd: Location deposited:

Contact Information

Type: Technical/Permit

Name: Cliff Bragg, Plant Manager

Authorized: Cliff Bragg, Plant Manager

Address:

16900 Aberdeen Road

16900 Aberdeen Road

City/State/ZIP:

Laurinburg, NC 28352

Laurinburg, NC 28352

Telephone:

(304) 642-1156

(304) 642-1156

Acceptance Criteria

Received? N/A

Yes: Application fee

N/A: Appropriate number of apps submitted

N/A: Zoning Addressed

Yes: Source recycling/reduction form

N/A: Authorized signature

N/A: PE Seal

N/A: Emissions Inventory Rec'd - Renewal Only

Completeness Criteria

Received? Complete Item Description

Yes: Req'd app forms submitted & completed

N/A: Supporting materials/calcs received

N/A: PE seal if 15A NCAC 2Q.0112

N/A: Modeling protocol acceptable

N/A: Confirmation of pollutants modeled

Comprehensive Application Report for 8300104.1EA
Natures Earth Pellets NC, LLC - Laurinburg (8300104)

02/23/2011

Scotland County

<u>Event</u>	<u>Start</u>	<u>Due</u>	<u>Complete</u>	<u>Comments</u>	<u>Staff</u>
Application Events					
Acknowledgment letter due	02/11/2011	02/21/2011	02/11/2011		Jemoser
Permit issued	02/22/2011	05/12/2011	02/22/2011		gwreeves

Comprehensive Application Report for 8300104.11A

02/23/2011

Natures Earth Pellets NC, LLC - Laurinburg (8300104)

Scotland County

Outcome Information		<u>Permit/Revision:</u> 10012/R01
Class before: Synthetic Minor	Class after: Synthetic Minor	<u>Revision Issue Date:</u> 02/22/2011
2Q .0711: Yes	2D .1100: Yes	Accumulated process days (includes public notice periods): 11
NSPS: No	NESHAPS/MACT: No	PSD/NSR: No
PSD/NSR Avoid: No	Prohibitory Small: No	Public notice/hearing/add info after 80 days:
PSD/NSR Status After: Minor	General permit: No	Manager's discretion: Appealed? No
Multi-site permit: No	Multi. permits at facility: No	<u>Current Permit Information:</u>
Quarry permit: No	HAP Major (10/25 tpy): Minor	<u>Issue</u> <u>Effective</u> <u>Expiration</u> <u>Revision #</u>
2Q .0705 Last MACT/Toxics: NO	NESHAPS/GACT: NO	02/22/2011 02/22/2011 10/31/2014 R01
New Source RACT/LAER: NO	Existing Source RACT: NO	
RACT/LAER Added Fee: NO	RACT Avoidance: NO	
2Q .0702 (a)(18) - Toxics/Combustion Source(s) After 07/10/10: NO		

Regulations Pertaining to this Permit	Regulation Description
<u>Reference Rule</u>	

Audit Information Pertaining to this Application	
<u>Column Name</u> <u>Date Changed</u> <u>Old Value</u> <u>New Value</u>	<u>Editor</u>



North Carolina Department of Environment and Natural Resources

Division of Air Quality

Beverly Eaves Perdue
Governor

Sheila C. Holman
Director

Dee Freeman
Secretary

February 22, 2011

Mr. Cliff Bragg
Plant Manager
Natures Earth Pellets NC, LLC
16900 Aberdeen Road
Laurinburg, NC 28352

Subject: Air Permit No. 10012R01
Natures Earth Pellets NC, LLC
Laurinburg, Scotland County, North Carolina
Permit Class: Synthetic Minor
Facility ID# 8300104

Dear Mr. Bragg:

In accordance with your completed application received February 11, 2011, we are forwarding herewith Permit No. 10012R01 to Natures Earth Pellets NC, LLC, Laurinburg, Scotland County, North Carolina for the construction and operation of air emissions sources or air cleaning devices and appurtenances. Please note the records retention requirements are contained in General Condition 2 of the General Conditions and Limitations.

If any parts, requirements, or limitations contained in this permit are unacceptable to you, you have the right to request a formal adjudicatory hearing within 30 days following receipt of this permit, identifying the specific issues to be contested. Such a request will stay the effectiveness of the entire permit. This hearing request must be in the form of a written petition, conforming to G.S. 150B-23 of the North Carolina General Statutes, and filed with the Office of Administrative Hearings, 6714 Mail Service Center, Raleigh, NC 27699-6714. The form for requesting a formal adjudicatory hearing may be obtained upon request from the Office of Administrative Hearings. Unless a request for a hearing is made pursuant to G.S. 150B-23, this air permit shall be final and binding.

You may request modification of your air permit through informal means pursuant to G.S. 150B-22. This request must be submitted in writing to the Director and must identify the specific provisions or issues for which the modification is sought. Please note that the permit will become final and binding regardless of a request for informal modification unless a request for a hearing is also made under G.S. 150B-23.

Fayetteville Regional Office - Division of Air Quality
Systel Building, 225 Green Street, Suite 714, Fayetteville, North Carolina 28301-5094
Phone: (910) 433-3300 \ FAX: (910) 485-7467 \ Internet: www.ncair.org/

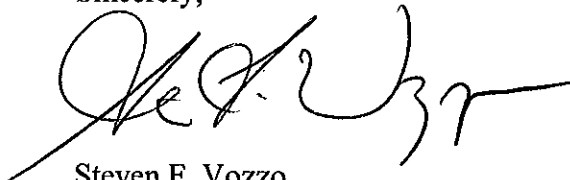
One
North Carolina
Naturally

Unless exempted by a condition of this permit or the regulations, construction of new air pollution sources or air cleaning devices, or modifications to the sources or air cleaning devices described in this permit must be covered under a permit issued by the Division of Air Quality prior to construction. Failure to do so is a violation of G.S. 143-215.108 and may subject the Permittee to civil or criminal penalties as described in G.S. 143-215.114A and 143-215.114B.

This permit shall be effective from February 22, 2011 until October 31, 2014, is nontransferable to future owners and operators, and shall be subject to the conditions and limitations as specified therein.

Changes have been made to the permit stipulations. The Permittee is responsible for carefully reading the entire permit and evaluating the requirements of each permit stipulation. The Permittee shall comply with all terms, conditions, requirements, limitations and restrictions set forth in this permit. Noncompliance with any permit condition is grounds for enforcement action, for permit termination, revocation and reissuance, or modification, or for denial of a permit renewal application. Should you have any questions concerning this matter, please contact Gregory Reeves at (910) 433-3300.

Sincerely,

A handwritten signature in black ink, appearing to read 'S. F. Vozzo', written over a horizontal line.

Steven F. Vozzo
Regional Air Quality Supervisor

GWR
Enclosures

c: Fayetteville Regional Office

NORTH CAROLINA ENVIRONMENTAL MANAGEMENT COMMISSION

DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES

DIVISION OF AIR QUALITY

AIR PERMIT NO. 10012R01

Issue Date: February 22, 2011
 Expiration Date: October 31, 2014

Effective Date: February 22, 2011
 Replaces Permit: 10012R00

To construct and operate air emission source(s) and/or air cleaning device(s), and for the discharge of the associated air contaminants into the atmosphere in accordance with the provisions of Article 21B of Chapter 143, General Statutes of North Carolina (NCGS) as amended, and other applicable Laws, Rules and Regulations,

Natures Earth Pellets NC, LLC
 16900 Aberdeen Road
 Laurinburg, Scotland County, North Carolina
 Permit Class: Synthetic Minor
 Facility ID# 8300104

(the Permittee) is hereby authorized to construct and operate the air emissions sources and/or air cleaning devices and appurtenances described below:

Emission Source ID	Emission Source Description	Control System ID	Control System Description
Hammermill Operation			
HM-1	Hammermill Feed Operation No.1	HMFC-1, BF-2	Cyclone (42 inches diameter) in series with a bagfilter (4902 ft2 filter area)
HM-2	Hammermill Feed Operation No.2	HMFC-2, BF-2	Cyclone (42 inches diameter) in series with a bagfilter (4902 ft2 filter area)
HM-3	Hammermill Feed Operation No.3	HMFC-3, BF-2	Cyclone (42 inches diameter) in series with a bagfilter (4902 ft2 filter area)
HM-4	Hammermill Feed Operation No.4	HMFC-4, BF-2	Cyclone (42 inches diameter) in series with a bagfilter (4902 ft2 filter area)
HM-5	Hammermill Feed Operation No.5	HMFC-5, BF-2	Cyclone (42 inches diameter) in series with a bagfilter (4902 ft2 filter area)
HM-6	Hammermill Feed Operation No.6	HMFC-6, BF-2	Cyclone (42 inches diameter) in series with a bagfilter (4902 ft2 filter area)
FWHM	Fuel Wood Hammermill Operation	FWHC-1	Cyclone (78 inches diameter)

Emission Source ID	Emission Source Description	Control System ID	Control System Description
Pellet Mill Operation			
PM-1	Pellet Mill Feed Operation No.1	PMFC-1, BF-2	Cyclone (72 inches diameter) in Series with a bagfilter (4902 ft2 filter area)
PM-2	Pellet Mill Feed Operation No.2	PMFC-2, BF-2	Cyclone (72 inches diameter) in Series with a bagfilter (4902 ft2 filter area)
PM-3	Pellet Mill Feed Operation No.3	PMFC-3, BF-2	Cyclone (72 inches diameter) in Series with a bagfilter (4902 ft2 filter area)
PM-4	Pellet Mill Feed Operation No.4	PMFC-4, BF-5	Cyclone (72 inches diameter) in Series with a bagfilter (1404 ft2 filter area)
PM-5	Pellet Mill Feed Operation No.5	PMFC-5, BF-5	Cyclone (72 inches diameter) in series with a bagfilter (1404 ft2 filter area)
PM-6	Pellet Mill Feed Operation No.6	PMFC-6, BF-5	Cyclone (72 inches diameter) in Series with a bagfilter (1404 ft2 filter area)
Truck Loadout			
TD-1	Truck Dump (150 tons per hour capacity)	BF-1	Bagfilter (4902 ft2 filter area)
Drying System			
DFBC-1	Dryer Fuel Bin Loading Operation	BF-1, DFBC-1	Cyclone (42 inches diameter) in series with a bagfilter (4902 ft2 filter area)
RD-1	Direct Wood-fired Rotary Dryer (maximum throughput 18.4 tons per hour)	HEC-1	Twin High Efficiency Cyclones (120 inches diameter)
Conveying Operation			
BE-1	Bucket Elevator	BF-1	Bagfilter (4902 ft2 filter area)
DC-1	Drag Conveyor No.1 (150 tons per hour capacity)	BF-1	Bagfilter (4902 ft2 filter area)
DC-2	Drag Conveyor No.2 (150 tons per hour capacity)	BF-1	Bagfilter (4902 ft2 filter area)
SLC-1	Silo Loading Conveyor	BF-1	Bagfilter (4902 ft2 filter area)
Storage Silos			
DHS-1	Dry Hardwood Silo No.1 (800 tons capacity)	BV-1	Bin Vent Filter (1780 ft2 filter area)
SS-2	Softwood Silo No.2 (800 tons capacity)	BF-1	Bagfilter (4902 ft2 filter area)
SS-3	Softwood Silo No.3 (800 tons capacity)	BF-1	Bagfilter (4902 ft2 filter area)
GHS-4	Green Hardwood Silo No.4 (800 tons capacity)	BF-1	Bagfilter (4902 ft2 filter area)
HPS-1	Hardwood Pellet Silo	HPC-1, BF-4	Cyclone (42 inches diameter) in Series with a bagfilter (1814 ft2 filter area)
SPS-1	Softwood Pellet Silo	SPC-1, BF-4	Cyclone (42 inches diameter) in Series with a bagfilter (1814 ft2 filter area)

Emission Source ID	Emission Source Description	Control System ID	Control System Description
Aspirator Operation			
AF-1	Aspirator Feed Operation No.1	AFC-1, BF-2	Cyclone (42 inches diameter) in Series with a bagfilter (4902 ft2 filter area)
A-1	Aspirator No.1	PFFC-1, BF-3	Cyclone (72 inches diameter) in Series with a bagfilter (4902 ft2 filter area)
AF-2	Aspirator Feed Operation No.2	AFC-2, BF-2	Cyclone (42 inches diameter) in Series with a bagfilter (4902 ft2 filter area)
A-2	Aspirator No.2	PFFC-2, BF-3	Cyclone (72 inches diameter) in Series with a bagfilter (4902 ft2 filter area)
Pellet Cooler Operation			
PCF-1	Pellet Cooler Feed Operation No.1	PCFC-1	Cyclone (42 inches diameter)
PCF-2	Pellet Cooler Feed Operation No.2	PCFC-2	Cyclone (42 inches diameter)
PCF-3	Pellet Cooler Feed Operation No.3	PCFC-3	Cyclone (42 inches diameter)
PCF-4	Pellet Cooler Feed Operation No.4	PCFC-4	Cyclone (42 inches diameter)
PCF-5	Pellet Cooler Feed Operation No.5	PCFC-5	Cyclone (42 inches diameter)
PCF-6	Pellet Cooler Feed Operation No.6	PCFC-6	Cyclone (42 inches diameter)
PC-1	Pellet Cooler No.1	PCC-1, BF-3	Cyclone (66 inches diameter) in series with a bagfilter (4902 ft2 filter area)
PC-2	Pellet Cooler No.2	PCC-2, BF-3	Cyclone (66 inches diameter) in series with a bagfilter (4902 ft2 filter area)
PC-3	Pellet Cooler No.3	PCC-3, BF-3	Cyclone (66 inches diameter) in series with a bagfilter (4902 ft2 filter area)
PC-4	Pellet Cooler No.4	PCC-4, BF-5	Cyclone (66 inches diameter) in Series with a bagfilter (1404 ft2 filter area)
PC-5	Pellet Cooler No.5	PCC-5, BF-5	Cyclone (66 inches diameter) in series with a bagfilter (1404 ft2 filter area)
PC-6	Pellet Cooler No.6	PCC-6, BF-5	Cyclone (66 inches diameter) in series with a bagfilter (1404 ft2 filter area)

in accordance with the completed application 8300104.11A received February 11, 2011 including any plans, specifications, previous applications, and other supporting data, all of which are filed with the Department of Environment and Natural Resources, Division of Air Quality (DAQ) and are incorporated as part of this permit.

This permit is subject to the following specified conditions and limitations including any TESTING, REPORTING, OR MONITORING REQUIREMENTS:

A. SPECIFIC CONDITIONS AND LIMITATIONS

1. Any air emission sources or control devices authorized to construct and operate above must be operated and maintained in accordance with the provisions contained herein. The Permittee shall comply with applicable Environmental Management Commission Regulations, including Title 15A North Carolina Administrative Code (NCAC), Subchapter 2D .0200, 2D .0202, 2D .0515, 2D .0516, 2D .0521, 2D .0535, 2D .0540, 2D .0611, 2D .1100, 2D .1806, 2Q .0315, 2Q .0317 (Avoidance) and 2Q .0711.
2. RECORDKEEPING REQUIREMENTS FOR SAWDUST AND WOOD CHIPS - The Permittee shall combust only clean, untreated, and unadulterated greenwood chips and sawdust from the sawmill in the direct wood-fired rotary dryer (RD-1). The Permittee shall maintain the records of the sawdust and wood chips supplier certification on-site for each batch received. All records required under this section shall be maintained for a period of two years and made available to DAQ personnel upon request. The Permittee shall be deemed in noncompliance if recordkeeping requirements are not maintained.
3. PERMIT RENEWAL AND EMISSION INVENTORY REQUIREMENT - The Permittee, at least 90 days prior to the expiration date of this permit, shall request permit renewal by letter in accordance with 15A NCAC 2Q .0304(d) and (f). Pursuant to 15A NCAC 2Q .0203(i), no permit application fee is required for renewal of an existing air permit (without a modification request). The renewal request (with AA application form) should be submitted to the Regional Supervisor, DAQ. Also, at least 90 days prior to the expiration date of this permit, the Permittee shall submit the air pollution emission inventory report (with Certification Sheet) in accordance with 15A NCAC 2D .0202, pursuant to N.C. General Statute 143 215.65. The report shall be submitted to the Regional Supervisor, DAQ and shall document air pollutants emitted for the 2013 calendar year.
4. PARTICULATE CONTROL REQUIREMENT - As required by 15A NCAC 2D .0515 "Particulates from Miscellaneous Industrial Processes," particulate matter emissions from the emission sources shall not exceed allowable emission rates. The allowable emission rates are, as defined in 15A NCAC 2D .0515, a function of the process weight rate and shall be determined by the following equation(s), where P is the process throughput rate in tons per hour (tons/hr) and E is the allowable emission rate in pounds per hour (lbs/hr).

$$E = 4.10 * (P)^{0.67} \quad \text{for } P \leq 30 \text{ tons/hr, or}$$

$$E = 55 * (P)^{0.11} - 40 \quad \text{for } P > 30 \text{ tons/hr}$$
5. SULFUR DIOXIDE CONTROL REQUIREMENT - As required by 15A NCAC 2D .0516 "Sulfur Dioxide Emissions from Combustion Sources," sulfur dioxide emissions from Direct Wood-fired Rotary Dryer (maximum throughput 18.4 tons per hour) (ID No. RD-1) shall not exceed 2.3 pounds per million Btu heat input.

6. VISIBLE EMISSIONS CONTROL REQUIREMENT - As required by 15A NCAC 2D .0521 "Control of Visible Emissions," visible emissions from the emission sources, manufactured after July 1, 1971, shall not be more than 20 percent opacity when averaged over a six-minute period, except that six-minute periods averaging not more than 87 percent opacity may occur not more than once in any hour nor more than four times in any 24-hour period. However, sources which must comply with 15A NCAC 2D .0524 "New Source Performance Standards" or .1110 "National Emission Standards for Hazardous Air Pollutants" must comply with applicable visible emissions requirements contained therein.
7. NOTIFICATION REQUIREMENT - As required by 15A NCAC 2D .0535, the Permittee of a source of excess emissions that last for more than four hours and that results from a malfunction, a breakdown of process or control equipment or any other abnormal conditions, shall:
 - a. Notify the Director or his designee of any such occurrence by 9:00 a.m. Eastern time of the Division's next business day of becoming aware of the occurrence and describe:
 - i. the name and location of the facility,
 - ii. the nature and cause of the malfunction or breakdown,
 - iii. the time when the malfunction or breakdown is first observed,
 - iv. the expected duration, and
 - v. an estimated rate of emissions.
 - b. Notify the Director or his designee immediately when the corrective measures have been accomplished.

This reporting requirement does not allow the operation of the facility in excess of Environmental Management Commission Regulations.

8. FUGITIVE DUST CONTROL REQUIREMENT - As required by 15A NCAC 2D .0540 "Particulates from Fugitive Dust Emission Sources," the Permittee shall not cause or allow fugitive dust emissions to cause or contribute to substantive complaints or excess visible emissions beyond the property boundary. If substantive complaints or excessive fugitive dust emissions from the facility are observed beyond the property boundaries for six minutes in any one hour (using Reference Method 22 in 40 CFR, Appendix A), the owner or operator may be required to submit a fugitive dust plan as described in 2D .0540(f).

"Fugitive dust emissions" means particulate matter from process operations that does not pass through a process stack or vent and that is generated within plant property boundaries from activities such as: unloading and loading areas, process areas stockpiles, stock pile working, plant parking lots, and plant roads (including access roads and haul roads).

9. CYCLONE REQUIREMENTS - As required by 15A NCAC 2D .0611, particulate matter emissions shall be controlled as described in the permitted equipment list.
 - a. Inspection and Maintenance Requirements - The inspection, maintenance and record keeping requirements shall become effective . To comply with the provisions of this permit and ensure that emissions do not exceed the regulatory limits, the Permittee shall perform an annual (for each 12 month period following the initial inspection) inspection of the cyclone system. In addition, the Permittee shall perform periodic inspections and maintenance (I&M) as recommended by the manufacturer.
 - b. Recordkeeping Requirements - The results of all inspections and any variance from the manufacturer's recommendations or from those given in this permit (when applicable) shall be investigated with corrections made and dates of actions recorded in a cyclone logbook. Records of all maintenance activities shall be recorded in the logbook. The cyclone logbook (in written or electronic format) shall be kept on-site and made available to DAQ personnel upon request.

10. FABRIC FILTER REQUIREMENTS including cartridge filters, baghouses, and other dry filter particulate collection devices - As required by 15A NCAC 2D .0611, particulate matter emissions shall be controlled as described in the permitted equipment list.
 - a. Inspection and Maintenance Requirements - The inspection, maintenance and record keeping requirements shall become effective . To comply with the provisions of this permit and ensure that emissions do not exceed the regulatory limits, the Permittee shall perform, at a minimum, an annual (for each 12 month period following the initial inspection) internal inspection of each bagfilter system. In addition, the Permittee shall perform periodic inspections and maintenance as recommended by the equipment manufacturer.
 - b. Recordkeeping Requirements - The results of all inspections and any variance from manufacturer's recommendations or from those given in this permit (when applicable) shall be investigated with corrections made and dates of actions recorded in a logbook. Records of all maintenance activities shall be recorded in the logbook. The logbook (in written or electronic format) shall be kept on-site and made available to DAQ personnel upon request.

11. TOXIC AIR POLLUTANT EMISSIONS LIMITATION AND REPORTING

REQUIREMENT - Pursuant to 15A NCAC 2D .1100 "Control of Toxic Air Pollutants," and in accordance with the approved application for an air toxic compliance demonstration, the following permit limits shall not be exceeded:

Affected Source(s)	Toxic Air Pollutant	Emission Limit
Direct Wood-fired Rotary Dryer (maximum throughput 18.4 tons per hour) (RD-1)	Acrolein (107-02-8)	0.28 lb/hr
	Benzene (71-43-2)	665 lb/yr
	Formaldehyde (50-00-0)	1.77 lb/hr

- a. Restrictions - To ensure compliance with the above limits, the following restrictions shall apply:
 - i. The amount of direct wood-fired rotary dryer production at the facility shall not exceed 141,450 tons per 12-month period.
 - ii. The direct wood-fired rotary dryer production shall be less than 18.4 tons per hour, and
 - iii. The twin high efficiency cyclone structure (ID No. CD-7) shall be located no closer than 108 feet from the nearest property line or easement.

- b. Reporting Requirements - For compliance purposes, within 30 days after each calendar year, regardless of the actual emissions, the following shall be reported to the Regional Supervisor, DAQ:
 - i. The monthly and annual totals of the amount of direct wood-fired rotary dryer production at the facility for the previous 12 months.
 - ii. The maximum direct wood-fired rotary dryer production in any day.

- c. Recordkeeping Requirements - The following recordkeeping requirements apply:
 - i. The Permittee shall record the daily, monthly, and annual direct wood-fired rotary dryer production, in tons, for the previous 12 month period.

12. CONTROL AND PROHIBITION OF ODOROUS EMISSIONS - As required by 15A NCAC 2D .1806 "Control and Prohibition of Odorous Emissions" 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.

13. LIMITATION TO AVOID 15A NCAC 2Q .0501 - Pursuant to 15A NCAC 2Q .0315 "Synthetic Minor Facilities," to avoid the applicability of 15A NCAC 2Q .0501 "Purpose of Section and Requirement for a Permit," as requested by the Permittee, facility-wide emissions shall be less than the following:

Pollutant	Emission Limit (Tons per consecutive 12-month period)
PM ₁₀	100
NO _x	100
VOC	100

- a. Operations Restrictions - To ensure emissions do not exceed the limitations above, the following restrictions shall apply:
- i. The annual direct wood-fired rotary dryer production shall be less than 141,450 tons per consecutive 12-month period.
- b. Recordkeeping Requirements
- i. The Permittee shall record monthly and total annually the following:
 - A. the amount of direct wood-fired rotary dryer production for the previous 12 months
 - B. the PM₁₀, NO_x, and VOC emissions for the previous 12 months. The annual emissions must be calculated for each of the 12-month periods over the previous 14 months.
 - ii. A logbook, in electronic or paper format, indicating the amount of direct wood-fired rotary dryer production and PM₁₀, NO_x, and VOC emissions shall be kept on site and made available to DAQ personnel upon request. The Permittee shall be deemed in noncompliance if recordkeeping requirements are not maintained.
- c. Reporting Requirements - Within 30 days after each calendar year, regardless of the actual emissions, the Permittee shall submit the following:
- i. emissions and/or operational data listed below. The data should include monthly and 12 month totals for the previous 12 month period.
 - A. the monthly and annual total amounts of direct wood-fired rotary dryer production for the previous 12 months;
 - B. the monthly and annual total amounts of PM₁₀, NO_x, and VOC emissions for the previous 12 months. The annual emissions must be calculated for each of the 12-month periods over the previous 14 months.

14. LIMITATION TO AVOID 15A NCAC 2D .0530 "PREVENTION OF SIGNIFICANT DETERIORATION" - In accordance with 15A NCAC 2Q .0317, to comply with this permit and avoid the applicability of 15A NCAC 2D .0530 "Prevention of Significant Deterioration," as requested by the Permittee, emissions shall be limited as follows:

Affected Source(s)	Pollutant	Emission Limit (Tons Per Consecutive 12-month Period)
Facility Wide	PM ₁₀	250

- a. Operations Restrictions - To ensure emissions do not exceed the limitations above, the following restrictions shall apply:
 - i. By complying with the operations restrictions, recordkeeping requirements, and reporting requirements listed in stipulation 15A NCAC 2Q .0315, Limitation to Avoid 15A NCAC 2Q .0501 (Permit Condition 13), the Permittee shall have also complied with the operational requirements for 15A NCAC 2Q .0317, Limitation to Avoid 15A NCAC 2D .0530.

15. TOXIC AIR POLLUTANT EMISSIONS LIMITATION REQUIREMENT - Pursuant to 15A NCAC 2Q .0711 "Emission Rates Requiring a Permit," for each of the below listed toxic air pollutants (TAPs), the Permittee has made a demonstration that facility-wide actual emissions do not exceed the Toxic Permit Emission Rates (TPERs) listed in 15A NCAC 2Q .0711. The facility shall be operated and maintained in such a manner that emissions of any listed TAPs from the facility, including fugitive emissions, will not exceed TPERs listed in 15A NCAC 2Q .0711.

- a. A permit to emit any of the below listed TAPs shall be required for this facility if actual emissions from all sources will become greater than the corresponding TPERs.
- b. PRIOR to exceeding any of these listed TPERs, the Permittee shall be responsible for obtaining a permit to emit TAPs and for demonstrating compliance with the requirements of 15A NCAC 2D .1100 "Control of Toxic Air Pollutants".

- c. In accordance with the approved application, the Permittee shall maintain records of operational information demonstrating that the TAP emissions do not exceed the TPERs as listed below:

Pollutant	Carcinogens (lb/yr)	Chronic Toxicants (lb/day)	Acute Systemic Toxicants (lb/hr)	Acute Inhalants (lb/hr)
Acetaldehyde (75-07-0)				6.8
MEK (Methyl ethyl ketone) (78-93-3)		78		22.4
Methylene chloride (75-09-2)	1600		0.39	
Phenol (108-95-2)			0.24	
Styrene (100-42-5)			2.7	
Toluene (108-88-3)		98		14.4
Xylene (1330-20-7)		57		16.4

B. GENERAL CONDITIONS AND LIMITATIONS

1. TWO COPIES OF ALL DOCUMENTS, REPORTS, TEST DATA, MONITORING DATA, NOTIFICATIONS, REQUESTS FOR RENEWAL, AND ANY OTHER INFORMATION REQUIRED BY THIS PERMIT shall be submitted to the:

Regional Air Quality Supervisor
North Carolina Division of Air Quality
Fayetteville Regional Office
Systel Building
225 Green Street, Suite 714
Fayetteville, NC 28301-5094
(910) 433-3300

For identification purposes, each submittal should include the facility name as listed on the permit, the facility identification number, and the permit number.

2. RECORDS RETENTION REQUIREMENT - Any records required by the conditions of this permit shall be kept on site and made available to DAQ personnel for inspection upon request. These records shall be maintained in a form suitable and readily available for expeditious inspection and review. These records must be kept on site for a minimum of 2 years, unless another time period is otherwise specified.
3. ANNUAL FEE PAYMENT - Pursuant to 15A NCAC 2Q .0203(a), the Permittee shall pay the annual permit fee within 30 days of being billed by the DAQ. Failure to pay the fee in a timely manner will cause the DAQ to initiate action to revoke the permit.
4. EQUIPMENT RELOCATION - A new air permit shall be obtained by the Permittee prior to establishing, building, erecting, using, or operating the emission sources or air cleaning equipment at a site or location not specified in this permit.
5. REPORTING REQUIREMENT - Any of the following that would result in previously unpermitted, new, or increased emissions must be reported to the Regional Supervisor, DAQ:
 - a. changes in the information submitted in the application regarding facility emissions;
 - b. changes that modify equipment or processes of existing permitted facilities; or
 - c. changes in the quantity or quality of materials processed.

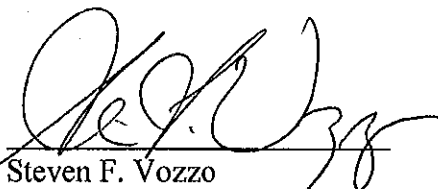
If appropriate, modifications to the permit may then be made by the DAQ to reflect any necessary changes in the permit conditions. In no case are any new or increased emissions allowed that will cause a violation of the emission limitations specified herein.

6. This permit is subject to revocation or modification by the DAQ upon a determination that information contained in the application or presented in the support thereof is incorrect, conditions under which this permit was granted have changed, or violations of conditions contained in this permit have occurred. The facility shall be properly operated and maintained at all times in a manner that will effect an overall reduction in air pollution. Unless otherwise specified by this permit, no emission source may be operated without the concurrent operation of its associated air cleaning device(s) and appurtenances.
7. This permit is nontransferable by the Permittee. Future owners and operators must obtain a new air permit from the DAQ.
8. This issuance of this permit in no way absolves the Permittee of liability for any potential civil penalties which may be assessed for violations of State law which have occurred prior to the effective date of this permit.
9. This permit does not relieve the Permittee of the responsibility of complying with all applicable requirements of any Federal, State, or Local water quality or land quality control authority.
10. Reports on the operation and maintenance of the facility shall be submitted by the Permittee to the Regional Supervisor, DAQ at such intervals and in such form and detail as may be required by the DAQ. Information required in such reports may include, but is not limited to, process weight rates, firing rates, hours of operation, and preventive maintenance schedules.
11. A violation of any term or condition of this permit shall subject the Permittee to enforcement pursuant to G.S. 143-215.114A, 143-215.114B, and 143-215.114C, including assessment of civil and/or criminal penalties.
12. Pursuant to North Carolina General Statute 143-215.3(a)(2), no person shall refuse entry or access to any authorized representative of the DAQ who requests entry or access for purposes of inspection, and who presents appropriate credentials, nor shall any person obstruct, hamper, or interfere with any such representative while in the process of carrying out his official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.
13. The Permittee must comply with any applicable Federal, State, or Local requirements governing the handling, disposal, or incineration of hazardous, solid, or medical wastes, including the Resource Conservation and Recovery Act (RCRA) administered by the Division of Waste Management.
14. PERMIT RETENTION REQUIREMENT - The Permittee shall retain a current copy of the air permit at the site. The Permittee must make available to personnel of the DAQ, upon request, the current copy of the air permit for the site.

15. CLEAN AIR ACT SECTION 112(r) REQUIREMENTS - Pursuant to 40 CFR Part 68 "Accidental Release Prevention Requirements: Risk Management Programs Under the Clean Air Act, Section 112(r)," if the Permittee is required to develop and register a risk management plan pursuant to Section 112(r) of the Federal Clean Air Act, then the Permittee is required to register this plan in accordance with 40 CFR Part 68.
16. PREVENTION OF ACCIDENTAL RELEASES - GENERAL DUTY - Pursuant to Title I Part A Section 112(r)(1) of the Clean Air Act "Hazardous Air Pollutants - Prevention of Accidental Releases - Purpose and General Duty," although a risk management plan may not be required, if the Permittee produces, processes, handles, or stores any amount of a listed hazardous substance, the Permittee has a general duty to take such steps as are necessary to prevent the accidental release of such substance and to minimize the consequences of any release. **This condition is federally-enforceable only.**
17. GENERAL EMISSIONS TESTING AND REPORTING REQUIREMENTS - If emissions testing is required by this permit, or the DAQ, or if the Permittee submits emissions testing to the DAQ in support of a permit application or to demonstrate compliance, the Permittee shall perform such testing in accordance with 15A NCAC 2D .2600 and follow all DAQ procedures including protocol approval, regional notification, report submittal, and test results approval.

Permit issued this the 22nd of February, 2011.

NORTH CAROLINA ENVIRONMENTAL MANAGEMENT COMMISSION



Steven F. Vozzo

Regional Air Quality Supervisor

By Authority of the Environmental Management Commission

Air Permit No. 10012R01