NORTH CAROLINA DIVISION OF AIR QUALITY

Air Permit Review

Permit Issue Date: 08/12/2014

Region: Fayetteville Regional Office
County: Scotland
NC Facility ID: 8300104
Inspector's Name: Robert Hayden
Date of Last Inspection: 05/15/2014
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:

RENEWAL

Contact Data

Facility Contact	Authorized Contact	Technical Contact
Trent Locklear Plant Manager (910) 291-0041 16900 Aberdeen Road Laurinburg, NC 28352	Trent Locklear Plant Manager (910) 291-0041 16900 Aberdeen Road Laurinburg, NC 28352	Trent Locklear Plant Manager (910) 291-0041 16900 Aberdeen Road Laurinburg, NC 28352

Application Data

Application Number: 8300104.14A
Date Received: 05/16/2014
Application Type: Renewal
Application Schedule: State

Existing Permit Data
Existing Permit Number: 10012/R01
Existing Permit Issue Date: 02/22/2011
Existing Permit Expiration Date: 10/31/2014

Review Engineer: Gregory Reeves

Review Engineer's Signature: **Date:** 08/12/2014

Comments / Recommendations:
Issue 10012/R02
Permit Issue Date: 08/12/2014
Permit Expiration Date: 07/31/2022

1. Purpose of Application:

Natures Earth Pellets NC, LLC is an existing wood pellet manufacturing operation located in Laurinburg, Scotland County. The facility has requested renewal of their air permit with no modifications.

The facility is classified as Synthetic Minor due to potential PM_{10}, NOx, and VOC emissions.

The permit application did not contain any confidential information.

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

There are two facility file "Pink Sheet" items and one inspection report item to be addressed in this permit action. The inspector notes that monthly and annual calculation of emissions of PM_{10}, NOx, and VOC emissions should be removed from the permit, and the requirement for annual reporting of these emissions should also be removed from the permit. See section 5 below for details.

2. Application Chronology:

04/03/14 The "Air Permit Renewal Reminder and Emissions Inventory Required" letter was sent to the facility.

05/15/14 The Air Permit application was received at FRO. It appeared that all required forms were received, and the application appeared to be complete for processing. No fees were required for the renewal application. Paper forms were received for the emission inventory. The emission inventory was not submitted electronically via AERO.

05/19/14 The permit application received acknowledgement letter was sent to the facility.

07/03/14 Greg Reeves was assigned as the engineer for this application.

08/01/14 Greg Reeves sent an email to Trent Locklear, requesting additional information about VOC emission factors for hammer mill operations, pellet presses, and pellet coolers. Information about softwood and hardwood percentages was also requested.

08/06/14 Greg Reeves spoke with Trent Locklear regarding emission factors. No newer emission factors are available from Natures Earth. The facility processes 40-60% softwood, 40-60% hardwood.

3. Zoning:

A Zoning Consistency Determination is not required for this permit renewal.

4. Facility Description:

Natures Earth Pellets receives green softwood and hardwood chips and sawdust and manufactures wood pellets. These pellets are used for various industries, including industrial boiler fuel, fuel for residential and small commercial wood stoves, bedding for horses, and cat litter. The virgin green wood chips and sawdust are received by truck at the facility and stored in silos. The moist feed material is dried to specific moisture content in a direct wood-fired rotary dryer. Fuel for the dryer is provided from fines that are removed from the pellet manufacturing process. Dried wood is fed to hammermills to reduce the particle size, then fed through pellet mills to form the pellets. Finished pellets are cooled and stored in bins. Finished product pellets are aspirated to remove fines, packaged in either small consumer sacks or bulk super sacks and shipped by truck to customers. Scalped fines are fed back to the dryer combustion feed. Particulate emissions from the process are controlled by a number of cyclones and fabric filters. Emissions from the process include particulates, CO, NOx, SO_2, and VOC from the wood combustion in the dryer, and particulates and VOC from the hammermill operations, pellet operation, and wood drying.

NC DAQ has permitted two large wood pellet manufacturing facilities in the past few years (Enviva – Ahoskie 4600107 in 2010 and Enviva – Northampton 6600167 in 2012.). In addition, Enviva has permitted a similar facility in Mississippi. Stack testing was performed at these three facilities from 2010 through 2013, yielding emission factors for VOC for these operations that were not available when the original permit for Natures Earth was issued. It is noted that the Natures Earth permit application in 2009 did not account for any VOC emissions from the hammermill operations or the pelleting operations. The only VOC emission noted in the application were from the wood combustion in the dryer and the drying of wood in the dryer, based on AP-42 emission factors for fiberboard drying. The stack testing at the three Enviva facilities and testing performed at the

Georgia Biomass facility in May 2012 indicated that there are significant VOC emissions from both the hammermills and the pellet operations in these wood pellet facilities.

Natures Earth stated in the original application that their maximum pellet production would be 32.75 tons/hr, with a maximum of 14.25 tons/hr of hardwood pellets and 18.5 tons/hr of softwood pellets produced.

5. Changes in Equipment, Controls, and Regulations:

- This application is for a renewal of the permit with no modifications.
- The facility "Pink Sheet" noted a request by the inspector for two changes to be made to the permit conditions:
  - ✓ Removal of the requirement for the Permittee to record monthly and annual emissions of PM_{10}, NOx, and VOC (listed as Specific Condition and Limitation A.13.b.i.B). This condition has been removed from the permit.
  - ✓ Removal of the requirement for the Permittee to annually report the emissions of PM_{10}, NOx, and VOC (listed as Specific Condition and Limitation A.13.c.i.B). This condition has been removed from the permit.
- The latest inspection report contained a recommendation that the "Truck Loadout" grouping be re-named as "Materials Receiving." This change has been made to the emission source chart.
- Note that newer emission factors for VOC are available from recent stack testing at similar wood pellet facilities. Due to the new calculations for the uncontrolled VOC emissions, a new Synthetic Minor throughput limitation has been calculated. The new limit is 69,000 tons throughput (pellet tons produced) per consecutive 12-month period. The recordkeeping requirements have been modified to reflect the amount of wood throughput for the facility instead of the amount of wood dried in the dryer. This limit is calculated by dividing the VOC emission limit (99 tons/yr) by the potential VOC emissions (409 tons/yr) and multiplying by the maximum throughput of the facility (32.75 tons/hr through pellet mills) times 8,760 hrs/yr. This yields 69,442 tons/yr. This was rounded down to 69,000 tons/yr.
- The original 2009 permit application utilized AP-42 emission factors for NOx and CO from the dryer operation based on the dryer throughput (oven dried tons), not the combustion process. It is believed that the emission factors were incorrectly applied to this operation, as the AP-42 emission factors are for oven drying of wood using combustion wood that has a moisture content greater than 50%. The wood used for combustion at Natures Earth is dry wood, averaging around 10% moisture. Therefore, the NOx and CO emission numbers were re-calculated using the NCDENR Woodwaste Combustion Calculator. As a result, the NOx synthetic minor limitation has been removed from the permit, as the potential NOx emission without controls does not exceed the Title V threshold of 100 tons/yr.
- The original permit contained a 2D .1100 condition that limited emissions of Acrolein, Benzene, and Formaldehyde from dryer combustion, limited dryer throughput to no more than 141,500 tons per year of wood dried, limited the dryer throughput rate to no more than 18.4 tons/hr of wood dried, and required the facility to maintain records of the total dryer wood throughput and the dryer throughput rate. With the newer emission factors for VOC, the facility synthetic minor limit

will be no more than 69,000 tons per year facility throughput. The dryer design maximum drying rate is 18.4 tons/hr of wood dried. Therefore, if the facility maintains total facility wood throughput (including drying) to no more than 69,000 tons/yr and does not exceed the design capacity throughput of the dryer, then the toxics limitations will be met. The maximum throughput limit for the dryer has therefore been replaced with a facility wood throughput limitation of 69,000 tons per year, and the hourly throughput limit has been removed from the permit. The facility will be required to record monthly and total annually the facility wood throughput.

As long as the facility keeps the total facility wood throughput below the synthetic minor limit of 69,000 tons per year, it is believed that all the toxics emissions will be below the limits set in the 2D .1100 condition.

The emission sources include the following:

Emission Source ID	Emission Source Description	Control System ID	Control System Description
Hammermill Operation			
HM-1	Hammermill Feed Operation No.1	HMFC-1 in series with BF-2	Cyclone (42 inches diameter) in series with Bagfilter (4902 square feet filter area)
HM-2	Hammermill Feed Operation No.2	HMFC-2 in series with BF-2	Cyclone (42 inches diameter) in series with Bagfilter (4902 square feet filter area)
HM-3	Hammermill Feed Operation No.3	HMFC-3 in series with BF-2	Cyclone (42 inches diameter) in series with Bagfilter (4902 square feet filter area)
HM-4	Hammermill Feed Operation No.4	HMFC-4 in series with BF-2	Cyclone (42 inches diameter) in series with Bagfilter (4902 square feet filter area)
HM-5	Hammermill Feed Operation No.5	HMFC-5 in series with BF-2	Cyclone (42 inches diameter) in series with Bagfilter (4902 square feet filter area)
HM-6	Hammermill Feed Operation No.6	HMFC-6 in series with BF-2	Cyclone (42 inches diameter) in series with Bagfilter (4902 square feet filter area)
FWHM	Fuel Wood Hammermill Operation	FWHC-1	Cyclone (78 inches diameter)
Pellet Mill Operation			
PM-1	Pellet Mill Feed Operation No.1	PMFC-1 in series with BF-2	Cyclone (72 inches diameter) in series with Bagfilter (4902 square feet filter area)
PM-2	Pellet Mill Feed Operation No.2	PMFC-2 in series with BF-2	Cyclone (72 inches diameter) in series with Bagfilter (4902 square feet filter area)
PM-3	Pellet Mill Feed Operation No.3	PMFC-3 in series with BF-2	Cyclone (72 inches diameter) in series with Bagfilter (4902 square feet filter area)
PM-4	Pellet Mill Feed Operation No.4	PMFC-4 in series with BF-5	Cyclone (72 inches diameter) in series with Bagfilter (1404 square feet filter area)
PM-5	Pellet Mill Feed Operation No.5	PMFC-5 in series with BF-5	Cyclone (72 inches diameter) in series with Bagfilter (1404 square feet filter area)

PM-6	Pellet Mill Feed Operation No.6	PMFC-6 in series with BF-5	Cyclone (72 inches diameter) in series with Bagfilter (1404 square feet filter area)
Truck Loadout			
TD-1	Truck Dump (150 tons per hour capacity)	BF-1	Bagfilter (4902 square feet filter area)
Drying System			
DFBC-1	Dryer Fuel Bin Loading Operation	BF-1 in series with DFBC-1	Cyclone (42 inches diameter) in series with Bagfilter (4902 square feet filter area)
RD-1	Direct Wood-fired Rotary Dryer (maximum throughput 18.4 tons per hour)	HEC-1	Two High Efficiency Cyclones in parallel (120 inches diameter each)
Conveying Operation			
BE-1	Bucket Elevator	BF-1	Bagfilter (4902 square feet filter area)
DC-1	Drag Conveyor No.1 (150 tons per hour capacity)		
DC-2	Drag Conveyor No.2 (150 tons per hour capacity)		
SLC-1	Silo Loading Conveyor		
Storage Silos			
DHS-1	Dry Hardwood Silo No.1 (800 tons capacity)	BV-1	Bin Vent Filter (1780 square feet filter area)
SS-2	Softwood Silo No.2 (800 tons capacity)	BF-1	Bagfilter (4902 square feet filter area)
SS-3	Softwood Silo No.3 (800 tons capacity)		
GHS-4	Green Hardwood Silo No.4 (800 tons capacity)		
HPS-1	Hardwood Pellet Silo	HPC-1 in series with BF-4	Cyclone (42 inches diameter) in series with Bagfilter (1814 square feet filter area)
SPS-1	Softwood Pellet Silo	SPC-1 in series with BF-4	Cyclone (42 inches diameter) in series with Bagfilter (1814 square feet filter area)
Aspirator Operation			
AF-1	Aspirator Feed Operation No.1	AFC-1 in series with BF-2	Cyclone (42 inches diameter) in series with Bagfilter (4902 square feet filter area)
A-1	Aspirator No.1	PFFC-1 in series with BF-3	Cyclone (72 inches diameter) in series with Bagfilter (4902 square feet filter area)
AF-2	Aspirator Feed Operation No.2	AFC-2 in series with BF-2	Cyclone (42 inches diameter) in series with Bagfilter (4902 square feet filter area)
A-2	Aspirator No.2	PFFC-2 in series with BF-3	Cyclone (72 inches diameter) in series with Bagfilter (4902 square feet 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 in series with BF-3	Cyclone (66 inches diameter) in series with Bagfilter (4902 square feet filter area)
PC-2	Pellet Cooler No.2	PCC-2 in series with BF-3	Cyclone (66 inches diameter) in series with Bagfilter (4902 square feet filter area)
PC-3	Pellet Cooler No.3	PCC-3 in series with BF-3	Cyclone (66 inches diameter) in series with Bagfilter (4902 square feet filter area)
PC-4	Pellet Cooler No.4	PCC-4 in series with BF-5	Cyclone (66 inches diameter) in series with Bagfilter (1404 square feet filter area)
PC-5	Pellet Cooler No.5	PCC-5 in series with BF-5	Cyclone (66 inches diameter) in series with Bagfilter (1404 square feet filter area)
PC-6	Pellet Cooler No.6	PCC-6 in series with BF-5	Cyclone (66 inches diameter) in series with Bagfilter (1404 square feet filter area)

6. NSPS, NESHAPs, PSD, Attainment Status, Chemical Accident Prevention (112r), and Greenhouse Gases (GHG):

- **NSPS** – There are no current NSPS regulations that apply to this facility.
- **NESHAP** – There are no current NESHAP regulations that apply to this facility.
- **PSD** – PSD does not impact this application.
- **Attainment Status** – Scotland County is in attainment
- **112(r)** - The facility is not subject to Section 112(r) of the Clean Air Act because none of the listed 112(r) chemicals are stored in amounts that exceed the threshold quantities. The facility is therefore not required to maintain a written Risk Management Plan (RMP).
- **Greenhouse Gases (GHG)** – The emissions of Greenhouse Gases at this facility do not exceed the PSD permit threshold of 100,000 tons per year.

7. Facility-Wide Air Toxics Review:

Air Dispersion Modeling of the expected toxics emissions from this facility was submitted with the original permit application in 2009. Acrolein, Benzene, and Formaldehyde emissions all exceeded their respective TPER and were modeled. Results of the modeling are as follows:

Pollutant	Averaging Period	Modeled Emission Rate	Maximum Modeled Concentration $\mu g/m^3$	AAL $\mu g/m^3$	% AAL
Acrolein	1-hour	0.28 lb/hr	1.82	80	2%
Benzene	Annual	665 lb/yr	0.01	0.120	8%
Formaldehyde	1-hour	1.77 lb/hr	11.5	150	8%

There is both a 2D .1100 and a 2Q .0711 toxics condition currently in the permit. The modeling was based on a throughput rate of 141,500 tons of wood per year. This throughput limitation is included in the 2D .1100 permit condition.

8. Facility Emissions Review:

Pollutant	2013 Actual Emissions tons/yr	Potential Emissions Before Controls/Limits tons/yr	Potential Emissions After Controls/Limits tons/yr
PM	0	863	14.9
PM_{10}	0	863	14.9
$PM_{2.5}$	0	863	14.9
SO_2	0	3.74	0.90
NOx	0	73.34	17.75
CO	0	89.80	21.74
VOC	0	409	99
GHG (CO_2e)* (Short Tons)	------	0	0

*GHG Potential emissions do not include 31,629 tons CO_2e from biogenic combustion that is currently deferred from the calculation by EPA.

2013 actual emissions are zero because the facility did not operate in 2013. Potential emissions before controls from wood combustion in the dryer are calculated using the NCDENR "Woodwaste Combustion Emissions Calculator Revision J." VOC emissions from drying, hammermills, and pellet mills are estimated using emission factors assumed to be similar to the Enviva Mississippi stack testing (59% softwood). Potential PM emissions after controls from the various processes are calculated using manufacturer-guarantees for particulate loading after controls. Potential PM emissions before controls are calculated using the after controls emissions and the manufacturer-supplied control

efficiencies and back-calculating the before controls numbers. See the attached table for emissions on pages 10 and 11 of this review for details.

9. Stipulation Review:

Regulation	Affected Sources	Emission Limits or Requirements
15A NCAC 2D .0202	Facility-wide	Permit Renewal and Emission Inventory Requirement
15A NCAC 2D .0515	Process Equipment	$E = 4.10 * (P)^{0.67}$ for P <= 30 tons/hr, or $E = 55 * (P)^{0.11} - 40$ for P >30 tons/hr
15A NCAC 2D .0516	RD-1	$SO_2 \leq 2.3$ lb/mmBtu
15A NCAC 2D .0521	Facility-wide	VE $\leq$ 20%
15A NCAC 2D .0535	Facility-wide	Excess Emissions Notification Requirement
15A NCAC 2D .0540	Facility-wide	Control fugitive dust emissions
15A NCAC 2D .0611	Cyclones	Cyclone Requirements Annual System Inspection Periodic I & M per Manufacturer's recommendations Recordkeeping
15A NCAC 2D .0611	Fabric Filters	Fabric Filter Requirements Annual Internal Inspection Periodic I&M per manufacturer recommendations Recordkeeping
15A NCAC 2D .1100	RD-1	Emission limitations for Acrolein, Benzene, and Formaldehyde based on modeling Annual Reporting Recordkeeping
15A NCAC 2D .1806	Facility-wide	No objectionable odors
15A NCAC 2Q .0315	Facility-wide	Synthetic Minor PM_{10}, NOx, VOC $\leq$ 100 tons per consecutive 12-month period Rotary Dryer throughput $\leq$ 69,000 tons per consecutive 12-month period Recordkeeping Annual Reporting
15A NCAC 2Q .0317 PSD Avoidance	Facility-wide	$PM_{10} \leq 250$ tons per consecutive 12-month period Compliance with Synthetic Minor operations, recordkeeping, and reporting requirements
15A NCAC 2Q .0317	Facility-wide	TPER Limits

10. Compliance History:

05/15/14 The latest facility inspection was conducted by Robert Hayden. The facility was found to be in apparent compliance during the inspection.

03/19/13 Robert Hayden inspected the facility and found the facility to be in apparent compliance. The facility was not operating.

02/15/13 NOC issued for late annual reporting.

06/26/12 NOV issued for recordkeeping deficiencies.

06/21/12 Robert Hayden inspected the facility and found it to be in violation for recordkeeping deficiencies.

02/14/12 NOV issued for late annual reporting.

08/09/11 NOV issued for recordkeeping deficiencies.

07/19/11 Robert Hayden and Greg Reeves inspected the facility and found it to be in violation for continuing recordkeeping deficiencies.

02/24/11 NOV issued for late annual reporting.

09/30/10 NOV issued for recordkeeping deficiencies.

09/14/10 Robert Hayden inspected the facility and found it to be in violation due to recordkeeping deficiencies.

11. Conclusions, Comments, and Recommendations:

I recommend that permit no. 10012R02 be issued to Natures Earth Pellets NC, LLC

Modifications to the Permit Writer output:

- Adjusted column widths, merged cells, bolded and highlighted throughout to improve appearance and enhance readability

Review Engineer: _____ Date: 08/12/2014

Permit Coordinator: _____ Date: _____

DAQ Supervisor: _____ Date: 08-12-14

\gwr
cc: FRO Files

Emission Source	Maximum Throughput tons/hr*	Controls	Control Efficiency %	VOC Emission Factor lb/ODT	Potential Uncontrolled Emissions				Potential Controlled Emissions (Before Permit Limits)			
					PM tons/yr	PM_{10} tons/yr	$PM_{2.5}$ tons/yr	VOC tons/yr	PM tons/yr	PM_{10} tons/yr	$PM_{2.5}$ tons/yr	VOC tons/yr
Material Receiving Conveying Silos 2-4 Dryer Fuel Loading	35.30	F	98		90	90	90		1.79	1.79	1.79	
Silo 1		F	98		10	10	10		0.20	0.20	0.20	
Hammermill Feed 1-6 Hammermills 1-3 Pellet Operations 1-3 Packaging Aspirators	32.7	C + F In series	98	1.47	128	128	128	210	2.56	2.56	2.56	210
Aspirator Feed Operations Pellet Coolers 1-3	32.75	C + F In series	98		128	128	128		2.55	2.55	2.55	
Pellet Coolers 4-6 Hammermills 4-6	32.75	C + F In series	98	0.53	84	84	84	76.0	1.69	1.69	1.69	76.0
Pellet Storage Silos	32.75	C + F In series	98		20	20	20		0.39	0.39	0.39	
Fuel Wood Hammermill	2.55	C	95		12	12	12		0.61	0.61	0.61	
Dryer	18.4 tons/hr 34.17 mmBtu/hr	C + C In parallel	80		216	216	216	104.8	43.19	43.19	43.19	104.8
Pellet Cooler Feeds 1-6	32.75	C	95	0.13	175	175	175	18.6	8.76	8.76	8.76	18.6
Totals					863	863	863	409.4	61.74	61.74	61.74	409.4

*Note that the maximum throughput of the process is limited by the throughput of the pellet mills, which is 32.75 tons per hour
C = Cyclone
F = Fabric Filter
The permit application asserted that all PM emissions are $PM_{2.5}$. Therefore, PM = PM_{10} = $PM_{2.5}$
VOC emissions are estimated basis either AP-42 emission factors (Table 10.6.2-3) for wood particle board drying (40-60% softwood, 40-60% hardwood), or from stack testing results from the Enviva Mississippi facility (59% softwood) (hammermills & pellet operations.)

Emission Source	Control Device Type	Control Device ID	After Control Emission Factor Grains/ft³	After-Control Emissions**			
				Air Flow ACFM	PM ton/yr	PM_{10} lb/ton	$PM_{2.5}$ lb/ton
Material Receiving Conveying Silos 2-4 Dryer Fuel Loading	Fabric Filter	BF-1	0.002	23,900	1.79	1.79	1.79
Silo 1	Fabric Filter	BV-1	0.002	2600	0.20	0.20	0.20
Hammermill Feed 1-6 Hammermills 1-3 Pellet Operations 1-3 Packaging Aspirators	Fabric Filter	BF-2	0.002	34,100	2.56	2.56	2.56
Aspirator Feed Operations Pellet Coolers 1-3	Fabric Filter	BF-3	0.002	34,000	2.55	2.55	2.55
Pellet Coolers 4-6 Hammermills 4-6	Fabric Filter	BF-5	0.002	22,500	1.69	1.69	1.69
Pellet Storage Silos	Fabric Filter	BF-4	0.002	5,200	0.39	0.39	0.39
Fuel Wood Hammermill	Cyclone	FWHC-1	234 ppm	250	0.61	0.61	0.61
Dryer	Cyclone	HEC-1	234 ppm	48,000	43.19	43.19	43.19
Pellet Cooler Feeds 1-6	Cyclone	PCFC-1 through PCFC-6	234 ppm	15,600	8.76	8.76	8.76

**Manufacturer guaranteed after-control particulate loading were used for sources controlled by fabric filters, as supplied with the original permit application in 2009

For cyclone-controlled sources, after-control particulate loading was guaranteed to be 234 ppm by the manufacturer, with 20% particulate dust.

After-control potential emissions are taken from the original permit application in 2009

The permit application asserted that all PM emissions are $PM_{2.5}$. Therefore, $PM = PM_{10} = PM_{2.5}$

Facility Total CY 2013 Emission Summary Recorded in ED

Facility ID #: 8300104

Facility Name: Natures Earth Pellets NC, LLC

Permit #(s): 10012R01

Green House Gases Pollutants (GHG) Pollutant	CAS	Actual Emissions Tons/Yr CY 2013 from ED	CY 2007 from Fees	Demini-mus	% Change
Carbon Dioxide (CO2)	124389	Not Reported	0.000000	5,000.0	N/A
CO2 equivalent (sum of individual GHG pollutant emission times their 1995 IPCC Global Warming Potential (GWP), converted to metric tons)		No GHGs Reported			

Criteria Pollutants Pollutant	CAS	Actual Emissions (Tons/Year) CY 2013 from ED	CY 2007 from Fees	Demini-mus	% Change
CO	CO	Not Reported	0.000000	0.5	N/A
NOx	NOx	Not Reported	0.000000	0.5	N/A
PM(TSP)	TSP	Not Reported	0.000000	0.5	N/A
PM10	PM10	Not Reported	0.000000	0.5	N/A
SO2	SO2	Not Reported	0.000000	0.5	N/A
VOC	VOC	Not Reported	0.000000	0.5	N/A

Hazardous Air Pollutants (HAPs) and/or Toxic Air Pollutants (TAPs) Pollutant	CAS	Actual Emissions (Pounds/Year) CY 2013 from ED	CY 2007 from Fees	Demini-mus	% Change
Acetaldehyde	75-07-0	Not Reported	0.000000	10.0	N/A
Acrolein	107-02-8	Not Reported	0.000000	10.0	N/A
Benzene	71-43-2	Not Reported	0.000000	1.0	N/A
Formaldehyde	50-00-0	Not Reported	0.000000	10.0	N/A

Facility Total CY 2013 Emission S. .mary Recorded in ED **Facility ID #:** 8300104

Facility Name: Natures Earth Pellets NC, LLC **Permit #(s):** 10012R01

Hazardous Air Pollutants (HAPs) and/or Toxic Air Pollutants (TAPs) Pollutant	CAS	Actual Emissions (Pounds/Year) CY 2013 from ED	CY 2007 from Fees	Demini-mus	% Change
MEK (methyl ethyl ketone, 2-butanone)	78-93-3	Not Reported	0.000000	100.0	N/A
Methylene chloride	75-09-2	Not Reported	0.000000	1.0	N/A
Phenol	108-95-2	Not Reported	0.000000	100.0	N/A
Propionaldehyde	123-38-6	Not Reported	0.000000	10.0	N/A
Styrene	100-42-5	Not Reported	0.000000	100.0	N/A
Toluene	108-88-3	Not Reported	0.000000	100.0	N/A
Xylene (mixed isomers)	1330-20-7	Not Reported	0.000000	100.0	N/A

Largest Individual HAP	
Total HAP Emissions	

DAQ's Comments Regarding Inventory

Hand-delivered (brought back after compliance inspection). Plant did not operate in 2013.

North Carolina Department of Environment and Natural Resources

Pat McCrory
Governor

John E. Skvarla, III
Secretary

August 12, 2014

Mr. Trent Locklear
Plant Manager
Natures Earth Pellets NC, LLC
16900 Aberdeen Road
Laurinburg, NC 28352

Subject: Air Permit No. 10012R02
Natures Earth Pellets NC, LLC
Laurinburg, Scotland County, North Carolina
Permit Class: Synthetic Minor
Facility ID# 8300104

Dear Mr. Locklear:

In accordance with your completed application received May 16, 2014, we are forwarding herewith Permit No. 10012R02 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.

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 August 12, 2014 until July 31, 2022, 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. Note that the throughput limit for the facility has been reduced to no more than 69,000 tons per year of raw wood feed, per the Specific Limitation and Condition A.13.a.i.

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,

Steven F. Vozzo, Regional Supervisor
Division of Air Quality, NCDENR

GWR
Enclosures

c: Fayetteville Regional Office

NORTH CAROLINA ENVIRONMENTAL MANAGEMENT COMMISSION

DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES

DIVISION OF AIR QUALITY

AIR PERMIT NO. 10012R02

Issue Date: August 12, 2014
Expiration Date: July 31, 2022

Effective Date: August 12, 2014
Replaces Permit: 10012R01

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 in series with BF-2	Cyclone (42 inches diameter) in series with Bagfilter (4902 square feet filter area)
HM-2	Hammermill Feed Operation No.2	HMFC-2 in series with BF-2	Cyclone (42 inches diameter) in series with Bagfilter (4902 square feet filter area)
HM-3	Hammermill Feed Operation No.3	HMFC-3 in series with BF-2	Cyclone (42 inches diameter) in series with Bagfilter (4902 square feet filter area)
HM-4	Hammermill Feed Operation No.4	HMFC-4 in series with BF-2	Cyclone (42 inches diameter) in series with Bagfilter (4902 square feet filter area)
HM-5	Hammermill Feed Operation No.5	HMFC-5 in series with BF-2	Cyclone (42 inches diameter) in series with Bagfilter (4902 square feet filter area)

Emission Source ID	Emission Source Description	Control System ID	Control System Description
HM-6	Hammermill Feed Operation No.6	HMFC-6 in series with BF-2	Cyclone (42 inches diameter) in series with Bagfilter (4902 square feet filter area)
FWHM	Fuel Wood Hammermill Operation	FWHC-1	Cyclone (78 inches diameter)
Pellet Mill Operation			
PM-1	Pellet Mill Feed Operation No.1	PMFC-1 in series with BF-2	Cyclone (72 inches diameter) in series with Bagfilter (4902 square feet filter area)
PM-2	Pellet Mill Feed Operation No.2	PMFC-2 in series with BF-2	Cyclone (72 inches diameter) in series with Bagfilter (4902 square feet filter area)
PM-3	Pellet Mill Feed Operation No.3	PMFC-3 in series with BF-2	Cyclone (72 inches diameter) in series with Bagfilter (4902 square feet filter area)
PM-4	Pellet Mill Feed Operation No.4	PMFC-4 in series with BF-5	Cyclone (72 inches diameter) in series with Bagfilter (1404 square feet filter area)
PM-5	Pellet Mill Feed Operation No.5	PMFC-5 in series with BF-5	Cyclone (72 inches diameter) in series with Bagfilter (1404 square feet filter area)
PM-6	Pellet Mill Feed Operation No.6	PMFC-6 in series with BF-5	Cyclone (72 inches diameter) in series with Bagfilter (1404 square feet filter area)
Materials Receiving			
TD-1	Truck Dump (150 tons per hour capacity)	BF-1	Bagfilter (4902 square feet filter area)
Drying System			
DFBC-1	Dryer Fuel Bin Loading Operation	DFBC-1 in series with BF-1	Cyclone (42 inches diameter) in series with Bagfilter (4902 square feet filter area)
RD-1	Direct Wood-fired Rotary Dryer (maximum throughput 18.4 tons per hour, 34.17 mmBtu per hour maximum heat input)	HEC-1	Two High Efficiency Cyclones (120 inches diameter each)
Conveying Operation			
BE-1	Bucket Elevator	BF-1	Bagfilter (4902 square feet filter area)
DC-1	Drag Conveyor No.1 (150 tons per hour capacity)		
DC-2	Drag Conveyor No.2 (150 tons per hour capacity)		
SLC-1	Silo Loading Conveyor		
Storage Silos			
DHS-1	Dry Hardwood Silo No.1 (800 tons capacity)	BV-1	Bin Vent Filter (1780 square feet filter area)
SS-2	Softwood Silo No.2 (800 tons capacity)	BF-1	Bagfilter (4902 square feet filter area)

Emission Source ID	Emission Source Description	Control System ID	Control System Description
SS-3	Softwood Silo No.3 (800 tons capacity)		
GHS-4	Green Hardwood Silo No.4 (800 tons capacity)		
HPS-1	Hardwood Pellet Silo	HPC-1 in series with BF-4	Cyclone (42 inches diameter) in series with Bagfilter (1814 square feet filter area)
SPS-1	Softwood Pellet Silo	SPC-1 in series with BF-4	Cyclone (42 inches diameter) in series with Bagfilter (1814 square feet filter area)
Aspirator Operation			
AF-1	Aspirator Feed Operation No.1	AFC-1 in series with BF-2	Cyclone (42 inches diameter) in series with Bagfilter (4902 square feet filter area)
A-1	Aspirator No.1	PFFC-1 in series with BF-3	Cyclone (72 inches diameter) in series with Bagfilter (4902 square feet filter area)
AF-2	Aspirator Feed Operation No.2	AFC-2 in series with BF-2	Cyclone (42 inches diameter) in series with Bagfilter (4902 square feet filter area)
A-2	Aspirator No.2	PFFC-2 in series with BF-3	Cyclone (72 inches diameter) in series with Bagfilter (4902 square feet 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 in series with BF-3	Cyclone (66 inches diameter) in series with Bagfilter (4902 square feet filter area)
PC-2	Pellet Cooler No.2	PCC-2 in series with BF-3	Cyclone (66 inches diameter) in series with Bagfilter (4902 square feet filter area)
PC-3	Pellet Cooler No.3	PCC-3 in series with BF-3	Cyclone (66 inches diameter) in series with Bagfilter (4902 square feet filter area)
PC-4	Pellet Cooler No.4	PCC-4 in series with BF-5	Cyclone (66 inches diameter) in series with Bagfilter (1404 square feet filter area)
PC-5	Pellet Cooler No.5	PCC-5 in series with BF-5	Cyclone (66 inches diameter) in series with Bagfilter (1404 square feet filter area)

Emission Source ID	Emission Source Description	Control System ID	Control System Description
PC-6	Pellet Cooler No.6	PCC-6 in series with BF-5	Cyclone (66 inches diameter) in series with Bagfilter (1404 square feet filter area)

in accordance with the completed application 8300104.14A received May 16, 2014 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 - Pursuant to 15A NCAC 2D .0605, 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 2021 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).

$E = 4.10 * (P)^{0.67}$ for P <= 30 tons/hr, or
$E = 55 * (P)^{0.11} - 40$ for P >30 tons/hr

5. SULFUR DIOXIDE CONTROL REQUIREMENT - As required by 15A NCAC 2D .0516 "Sulfur Dioxide Emissions from Combustion Sources," sulfur dioxide emissions from the combustion sources 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 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 - 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 - 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 twin high efficiency cyclone structure (ID No. CD-7) shall be located no closer than 108 feet from the nearest property line or easement.

ii. The facility-wide raw wood throughput shall be no more than 69,000 tons per year.

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 for raw wood throughput for the facility for the previous 12 month period.

c. Recordkeeping Requirements - The following recordkeeping requirements apply:

i. The Permittee shall record monthly and total annually the raw wood throughput for the facility.

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
NOx	100
VOC	100

a. Operations Restrictions - To ensure emissions do not exceed the limitations above, the following restrictions shall apply:

i. The raw wood feed throughput shall be less than 69,000 tons per consecutive 12-month period.

ii. Particulate emissions shall be controlled as per the descriptions in the emission source chart.

iii. The Permittee shall inspect and maintain the cyclones and fabric filters and maintain records per the requirements set forth in the 2D .0611 "Cyclone Requirements" and 2D .0611 "Fabric Filter Requirements" Specific Conditions and Limitations.

b. Recordkeeping Requirements

i. The Permittee shall record monthly and total annually the following:

A. the amount of raw wood feed, in tons

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 amount of raw wood feed, in tons

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 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 Irritants (lb/hr)
Acetaldehyde (75-07-0)				6.8
MEK (methyl ethyl ketone, 2-butanone) (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 (mixed isomers) (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 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 15A NCAC 2D .2100 "Risk Management Program," 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 with the USEPA 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 12th of August, 2014.

NORTH CAROLINA ENVIRONMENTAL MANAGEMENT COMMISSION

Steven F. Vozzo
Regional Supervisor
By Authority of the Environmental Management Commission