



ROY COOPER
Governor

MICHAEL S. REGAN
Secretary

MICHAEL A. ABRACZINSKAS
Acting Director

March 3, 2017

Mr. Royal Smith
Executive VP-Operations
Enviva Pellets Northampton, LLC
7200 Wisconsin Avenue, Suite 1000
Bethesda, Maryland 20814

SUBJECT: Air Quality Permit No. 10203R05
Facility ID: 6600167
Enviva Pellets Northampton, LLC
Gaston, North Carolina
Northampton County
Fee Class: Title V
PSD Status: Major

Dear Mr. Smith

In accordance with your completed Air Quality Permit Application for a renewal of your Title V permit received on December 19, 2016, we are forwarding herewith Air Quality Permit No. 10203R05 to Enviva Pellets Northampton, LLC, Lebanon Church Road, Garysburg, North Carolina authorizing the construction and operation, of the emission source(s) and associated air pollution control device(s) specified herein. Additionally, any emissions activities determined from your Air Quality Permit Application as being insignificant per 15A North Carolina Administrative Code 02Q .0503(8) have been listed for informational purposes as an "ATTACHMENT." Please note the requirements for the annual compliance certification are contained in General Condition P in Section 3. The current owner is responsible for submitting a compliance certification for the entire year regardless of who owned the facility during the year.

As the designated responsible official it is your responsibility to review, understand, and abide by all of the terms and conditions of the attached permit. It is also your responsibility to ensure that any person who operates any emission source and associated air pollution control device subject to any term or condition of the attached permit reviews, understands, and abides by the condition(s) of the attached permit that are applicable to that particular emission source.

If any parts, requirements, or limitations contained in this Air Quality 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. This hearing request must be in the form of a written petition, conforming to NCGS (North Carolina General Statutes) 150B-23, and filed with both the Office of Administrative Hearings, 6714 Mail Service Center, Raleigh, North Carolina 27699-6714 and the Division of Air Quality, Permitting Section, 1641 Mail Service Center, Raleigh, North Carolina 27699-1641. The form for requesting a formal adjudicatory hearing may be obtained upon request from the Office of Administrative Hearings. Please note that this permit will be stayed in its entirety upon receipt of the request for a hearing. Unless a request for a hearing is made pursuant to NCGS 150B-23, this Air Quality Permit shall be final and binding 30 days after issuance.

Mr. Smith
March 3, 2017

You may request modification of your Air Quality Permit through informal means pursuant to NCGS 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 this Air Quality Permit will become final and binding regardless of a request for informal modification unless a request for a hearing is also made under NCGS 150B-23.

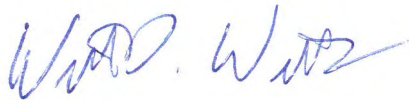
The construction of new air pollution emission source(s) and associated air pollution control device(s), or modifications to the emission source(s) and air pollution control device(s) described in this permit must be covered under an Air Quality Permit issued by the Division of Air Quality prior to construction unless the Permittee has fulfilled the requirements of NCGS 143-215.108A(b) and received written approval from the Director of the Division of Air Quality to commence construction. Failure to receive an Air Quality Permit or written approval prior to commencing construction is a violation of NCGS 143-215.108A and may subject the Permittee to civil or criminal penalties as described in NCGS 143-215.114A and 143-215.114B.

Northampton County has triggered increment tracking under PSD for PM₁₀, SO₂ and NO_x. However, this permit modification/renewal does not consume or expand increments for any pollutants.

This Air Quality Permit shall be effective from March 3, 2017 until February 28, 2025 is nontransferable to future owners and operators, and shall be subject to the conditions and limitations as specified therein.

Should you have any questions concerning this matter, please contact Yuki Puram at (919) 707-8470 or yuki.puram@ncdenr.gov.

Sincerely yours,



William D. Willets, P.E., Chief, Permitting Section
Division of Air Quality, NCDEQ

Enclosure

c: Raleigh Regional Office
Central

ATTACHMENT to Permit No. 10203R05

Insignificant Activities per 15A NCAC 02Q .0503(8)

| Emission Source ID No. | Emission Source Description |
|---------------------------------------|---|
| IES-DWH | Dried wood handling |
| IES-PP | Pellet press system |
| IES-FPH | Finished product handling |
| IS-TK1 and IS-TK2 | Two diesel storage tanks (2,500 gallon and 500 gallon capacity) |
| IES-EPWC | Electric powered green wood chipper |
| IES-RCHP-1 and IES-RCHP-2 | Two electric powered wood re-chippers |
| IES-GWHS | Green wood handling and storage |
| IES-GWFB | Green wood fuel storage bin |
| IES-GN NSPS III, MACT ZZZZ | One emergency use generator (350 brake horsepower) |
| IES-FWP NSPS III, MACT ZZZZ | One fire water pump (300 brake horsepower) |
| IES-CHIP-1 | Log Chipping |

1. Because an activity is insignificant does not mean that the activity is exempted from an applicable requirement or that the Permittee is exempted from demonstrating compliance with any applicable requirement.
2. When applicable, emissions from stationary source activities identified above shall be included in determining compliance with the permit requirements for toxic air pollutants under 15A NCAC 02D .1100 "Control of Toxic Air Pollutants" or 02Q .0711 "Emission Rates Requiring a Permit."
3. For additional information regarding the applicability of MACT or GACT see the DAQ page titled "Specific Permit Conditions Regulatory Guide." The link to this site is as follows:
<http://deq.nc.gov/about/divisions/air-quality/air-quality-permits/specific-permit-conditions-regulatory-guide>.

Summary of Changes to Permit

The following changes were made to the Enviva Pellets Northampton, LLC Air Permit No. 10203R05:

| Page No. | Section | Description of Changes |
|------------------|--|--|
| Global | Global | Updated permit number, permit format and dates. |
| Cover Page | Cover Page | Updated the header and the footer. |
| 3 | 1. Emission source table | <ul style="list-style-type: none"> • Rearranged the emission sources and control devices. • Changed the source ID Nos. ES-BCS-2 and BSC-3 to ES-BSC-2 and BSC-3. • Changed the source ID Nos. ES-BSSS-1 and BSSS-2 to BSS-1 and BSS-2. • Changed the control device ID No. CD-PFB-BV-1 to CD-PFB-BV. • Changed the control device ID Nos. DC-BS-BF-1 and DC-BS-BF-1 to CD-BS-BF-1 and CD-BS-BF-2 • Changed the description of CD-CLR-1 through CLR-6 to “Six high efficiency cyclones. |
| 5 7 7 8 | 2.1.A.1.b 2.1.A.2.b 2.1.A.3.b 2.2.A.1.b | <ul style="list-style-type: none"> • Changed the reference to General Condition 11. |
| 6 | 2.1.A.1.c | Changed the ID Nos. to be consistent with the emission source table. |
| 8 | 2.2.A.1 | Moved the PSD avoidance condition to the facility-wide sources specific limitations and conditions section. |
| 11 | 3 | Updated to the most recent general conditions. |



AIR QUALITY PERMIT

| Permit No. | Replaces Permit No.(s) | Effective Date | Expiration Date |
|------------|------------------------|----------------|-------------------|
| 10203R05 | 10203R04 | March 3, 2017 | February 28, 2025 |

Until such time as this permit expires or is modified or revoked, the below named Permittee is permitted to construct and operate the emission source(s) and associated air pollution control device(s) specified herein, in accordance with the terms, conditions, and limitations within this permit. This permit is issued under the provisions of Article 21B of Chapter 143, General Statutes of North Carolina as amended, and Title 15A North Carolina Administrative Codes (15A NCAC), Subchapters 02D and 02Q, and other applicable Laws.

Pursuant to Title 15A NCAC, Subchapter 02Q, the Permittee shall not construct, operate, or modify any emission source(s) or air pollution control device(s) without having first submitted a complete Air Quality Permit Application to the permitting authority and received an Air Quality Permit, except as provided in this permit.

Permittee: **Enviva Pellets Northampton, LLC**
Facility ID: **4600107**

Facility Site Location: **874 Lebanon Church Road**
City, County, State, Zip: **Garysburg, Northampton County, North Carolina, 27831**

Mailing Address: **7200 Wisconsin Avenue**
City, State, Zip: **Bethesda, Maryland, 20814**

Application Number: **6600167.16A**
Complete Application Date: **December 19, 2016**

Primary SIC Code: **2499**
Division of Air Quality, **Raleigh Regional Office**
Regional Office Address: **3800 Barrett Drive**
Raleigh, North Carolina, 27609

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ATTACHMENT

List of Acronyms

SECTION 1- PERMITTED EMISSION SOURCE (S) AND ASSOCIATED AIR POLLUTION CONTROL DEVICE (S) AND APPURTENANCES

The following table contains a summary of all permitted emission sources and associated air pollution control devices and appurtenances:

| Emission Source ID No. | Emission Source Description | Control Device ID No. | Control Device Description |
|----------------------------------|---|--------------------------------------|---|
| ES-DRYER | Direct heat, wood-fired dryer (174 million Btu per hour heat input, 71.71 ODT/hr) | CD-DC and CD-WESP | One simple cyclone (205 inches in diameter) in series with one wet electrostatic precipitator (29,904 square feet of total collection plate area) |
| ES-DLH | Dry line hopper | N/A | N/A |
| ES-HM-1 ES-HM-2 ES-HM-3 | Three hammermills | CD-HM-CYC-1 through 3, CD-HM-BF-1 | Three simple cyclones (120 inches in diameter each) in series with a fabric filter (6,250 square feet of filter area) |
| ES-HM-4 ES-HM-5 ES-HM-6 | Three hammermills | CD-HM-CYC-4 through 6, CD-HM-BF-2 | Three simple cyclones (120 inches in diameter each) in series with a fabric filter (6,250 square feet of filter area) |
| ES-HM-7 ES-HM-8 | Two hammermills, | CD-HM-CYC-7 and 8, CD-HM-BF-3 | Two simple cyclones (120 inches in diameter each) in series with a fabric filter (6,250 square feet of filter area) |
| ES-NDS ES-DLC-1 | Nuisance dust system and dry line feed conveyor | CD-HM-BF-3 | One fabric filter (6,250 square feet of filter area) |
| ES-PMFS | Pellet feed mill silo | CD-PMFS-BV | One bin vent filter (377 square feet of filter area) |
| ES-PFB-1 | Pellet fines bin | CD-PFB-BV | One bin vent filter (780 square feet of filter area) |
| ES-CLR1, through ES-CLR-6 | Pellet coolers | CD-CLR-1 through CD-CLR-6 | Six high efficiency cyclones (54 inches in diameter each) |
| ES-FPH | Finished product handling | CD-FPH-BF | One fabric filter (4,842 square feet of filter area) |
| ES-PB-1 through ES-PB-12 | Twelve (12) pellet load-out bins | | |
| ES-PL-1 ES-PL-2 | Pellet mill load-out 1 and 2 | | |
| ES-BSC-1 ES-BSS-1 ES-BSS-2 | Bagging system conveyor and two bagging system screens | CD-BS-BF-1 CD-BS-BF-2 | Two fabric filters (6,250 square feet of filter area each) |
| ES-BSC-2 ES-BSC-3 | Two bagging system conveyors | N/A | N/A |
| ES-BSB-1 ES-BSB-2 | Two bagging system bins | N/A | N/A |

SECTION 2 - SPECIFIC LIMITATIONS AND CONDITIONS

2.1 Emission Source(s) and Control Device(s) Specific Limitations and Conditions

The emission source(s) and associated air pollution control device(s) and appurtenances listed below are subject to the following specific terms, conditions, and limitations, including the testing, monitoring, recordkeeping, and reporting requirements as specified herein:

- A. Wood-fired dryer system (ID No. ES-DRYER) with associated cyclone and wet electrostatic precipitator (ID Nos. CD-DC and CD-WESP);**
Hammermills (ID Nos. ES-HM-1 through ES-HM-8) with associated cyclones (ID Nos. CD-HM-CYC-1 through CD-HM-CYC-8) and fabric filters (ID Nos. CD-HM-BF-1 through CD-HM-BF3);
Nuisance dust system (ID No. ES-NDS) with associated fabric filter (ID No. CD-HM-BF-3);
Pellet mill feed silo (ID No. ES-PMFS) with associated bin vent filter (ID No. CD-PMFS-BV);
Pellet fines bin (ID No. ES-PFB-1) with associated fabric filter (ID No. CD-PFB-BV);
Pellet coolers (ID Nos. ES-CLR1 through ES-CLR6) with associated cyclones (ID Nos. CD-CLR-1 through CD-CLR-6); Finished product handling (ID No. ES-FPH), pellet load-out bins (ID Nos. ES-PB-1 through ES-PB-12), and pellet mill load-out (ID Nos. ES-PL-1 and ES-PL-2) with associated fabric filter (ID No. CD-FPH-BF);
Bagging system conveyor (ID No. BSC-1) and associated fabric filter (ID No. DC-BS-BF-1);
Bagging system conveyors (ID Nos. BSC-2 and 3); Bagging system screen (ID No. ES-BSS-1) and associated fabric filter (ID No. DC-BS-BF-1);
Bagging system screen (ID No. ES-BSS-2) and associated fabric filter (ID No. DC-BS-BF-2); and
Bagging system bins (ID Nos. ES-BSB-1 and 2)

The following table provides a summary of limits and standards for the emission source(s) described above:

| Regulated Pollutant | Limits/Standards | Applicable Regulation |
|----------------------------|--|--|
| Particulate matter | $E = 4.10 \times P^{0.67}$ for process weight rate < 30 tph $E = 55 \times P^{0.11} - 40$ for process weigh rate ≥ 30 tph Where, E = allowable emission rate (lb/hr) P = process weight rate (tph) | 15A NCAC 02D .0515 |
| Sulfur dioxide | For Dryer System (ID No. ES-DRYER) 2.3 pounds per million Btu heat input | 15A NCAC 02D .0516 |
| Visible emissions | 20 percent opacity when averaged over a six minute period | 15A NCAC 02D .0521 |
| Toxic air pollutants | See Section 2.2 A.2 | 15A NCAC 02D .1100 |
| Toxic air pollutants | See Section 2.2 A.3 | 15A NCAC 02Q .0711 |
| Volatile organic compounds | For Dryer System (ID No. ES-DRYER) Less than 250 tons per consecutive 12 month period. | 15A NCAC 02Q .0317 for avoidance of 15A NCAC 02D .0530 |

1. 15A NCAC 02D .0515: PARTICULATES FROM MISCELLANEOUS INDUSTRIAL PROCESSES

- a. Emissions of particulate matter from these sources shall not exceed an allowable emission rate as calculated by the following equation: [15A NCAC 02D .0515(a)]

$$E = 4.10 \times P^{0.67} \text{ for process weight rate } < 30 \text{ tph}$$

$$E = 55 \times P^{0.11} - 40 \text{ for process weight rate } \geq 30 \text{ tph}$$

Where E = allowable emission rate in pounds per hour

P = process weight in tons per hour

Liquid and gaseous fuels and combustion air are not considered as part of the process weight.

Testing

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition 17.

Monitoring/Recordkeeping

- c. Particulate matter emissions shall be controlled as follows:

- Particulate matter emissions from the wood dryer system (ID No. ES-DRYER) shall be controlled by a simple cyclone (ID No. CD-DC) in series with a wet electrostatic precipitator (ID No. CD-WESP).
- Particulate matter emissions from the dry line feed conveyor (ID No. ES-DLC-1) shall be controlled by fabric filter (ID No. CD-HM-BF-3).
- Particulate matter emissions from the eight hammermills (ID Nos. ES-HM-1 through ES-HM-8) shall be controlled by eight simple cyclones (ID Nos. CD-HM-CYC-1 through CD-HM-CYC-8) in series with three fabric filters (ID Nos. CD-HM-BF-1 through CD-HM-BF-3).
- Particulate matter emissions from the nuisance dust system (ID No. ES-NDS) shall be controlled by one fabric filter (ID No. CD-HM-BF-3).
- Particulate matter emissions from the pellet mill feed silo (ID No. ES-PMFS) shall be controlled by a bin vent filter (ID No. CD-PMFS-BV).
- Particulate matter emissions from the pellet mill fines bin (ID No. ES-PFB-1) shall be controlled by a fabric filter (ID No. CD-PFB-BV).
- Particulate matter emissions from the pellet coolers (ID Nos. ES-CLR-1 through ES-CLR-6) shall be controlled by six simple cyclones (ID Nos. CD-CLR-C1 through CD-CLR-C6).
- Particulate matter emissions from the finished product handling (ID No. ES-FPH), pellet load-out bins (ID Nos. ES-PB-1 through ES-PB-12), and pellet mill load-out (ID No. ES-PL-1 and ES-PB-2) shall be controlled by one fabric filter (ID No. CD-FPH-BF).
- Particulate matter emissions from the bagging system conveyor (ID No. ES-BSC-1) shall be controlled by a fabric filter (ID No. CD-BS-BF-1).
- Particulate matter emissions from the bagging system screen (ID No. ES-BSS-1) shall be controlled by a fabric filter (ID No. CD-BS-BF-1).
- Particulate matter emission from the bagging system screen (ID No. ES-BSS-2) shall be controlled by a fabric filter (ID No. CD-BS-BF-2).

For bagfilters and cyclones:

- d. To ensure compliance, the Permittee shall perform inspections and maintenance as recommended by the manufacturer. In addition to the manufacturer's inspection and maintenance recommendations, or if there is no manufacturer's inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement shall include the following:
 - i. a monthly visual inspection of the system ductwork and material collection unit for leaks.
 - ii. an annual (for each 12 month period following the initial inspection) internal inspection of the bagfilters' structural integrity.

For wet electrostatic precipitator:

- e. To ensure compliance, the Permittee shall perform inspections and maintenance as recommended by the manufacturer. In addition to the manufacturer's inspection and maintenance recommendations, or if there is no manufacturer's inspection and maintenance recommendations, as a minimum, the Permittee shall establish the minimum primary voltage and minimum current within the first 30 days following operation of the dryer. To ensure compliance and effective operation of the wet electrostatic precipitator, the Permittee shall monitor and record the primary voltage and current through the precipitator daily. The daily observation must be made for each day of the calendar year period. The Permittee shall be allowed three (3) days of absent observations per semi-annual period.
- f. The results of inspection and maintenance shall be maintained in a log (written or electronic format) on-site and made available to an authorized representative upon request. The log shall record the following:
 - i. the date and time of each recorded action;
 - ii. the results of each inspection;
 - iii. the results of any maintenance performed; and
 - iv. any variance from manufacturer's recommendations, if any, and corrections made.

Reporting

- g. The Permittee shall submit the results of any maintenance performed on the WESP, cyclones and bagfilters within 30 days of a written request by the DAQ.

2. 15A NCAC 02D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES

- a. Emissions of sulfur dioxide from the wood dryer system (ID No. ES-DRYER) shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard. [15A NCAC 02D .0516]

Testing

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition 17.

Monitoring/Recordkeeping

- c. No monitoring/recordkeeping is required for sulfur dioxide emissions from firing wood for the wood dryer system.

3. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

- a. Visible emissions from these sources (ID Nos. ES-DRYER, ES-DLB, ES-DLC-1, ES-BSC-1, ES-BSC-2, ES-BSC-3, ES-BSS-1, ES-BSS-2, ES-BSB-1, ES-BSB-2, ES-HM-1 through ES-HM-8, ES-NDS, ES-PMFS, ES-PFB, ES-CLR-1 through ES-CLR-6, ES-FPH, ES-PB-1 through ES-PB-12, ES-PL-1 and ES-PL-2) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity. [15A NCAC 02D .0521 (d)]

Testing

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition 17.

Monitoring

- c. To ensure compliance, once a month the Permittee shall observe the emission points of this source for any visible emissions above normal. The monthly observation must be made for each month of the calendar year period to ensure compliance with this requirement. The Permittee shall establish “normal” for the source in the first 30 days following the effective date of the permit. If visible emissions from this source are observed to be above normal, the Permittee shall either:
 - i. take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
 - ii. demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 02D .2601 (Method 9) for 12 minutes is below the limit given in Section 2.1 A.3. a. above.

Recordkeeping

- d. The results of the monitoring shall be maintained in a log (written or electronic format) on-site and made available to an authorized representative upon request. The log shall record the following:
 - i. the date and time of each recorded action;
 - ii. the results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
 - iii. the results of any corrective actions performed.

2.2 Multiple Emission Source(s) Specific Limitations and Conditions

A. Facility-wide sources

1. 15A NCAC 02Q. 0317: AVOIDANCE CONDITIONS

15A NCAC 02D. 0530: PREVENTION OF SIGNIFICANT DETERIORATION

- a. In order to avoid applicability of this regulation, the facility shall discharge into the atmosphere less than 456.4 tons of volatile organic compounds (VOCs) and less than 250 tons of carbon monoxide (CO) each per consecutive 12-month period. [15A NCAC 02D .0530]

Testing

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition 17.

Monitoring/Recordkeeping

- c. The Permittee shall demonstrate compliance with the facility-wide VOC emission limitation by calculating the rolling 12-month annual facility-wide VOC emission on a monthly basis (by the 30th day following the end of each calendar month). The VOC emissions shall be calculated in a manner consistent with the calculation methodologies included in the air permit supporting this limitation. Emission factors used in the calculations for each source shall be appropriate for the annual average softwood content that has been processed in the previous 12-month period. All emission factors used shall be reviewed and approved by DAQ.

Calculations of CO emissions from the dryer system (ID No. ES-DRYER) shall also be made at the end of each month. CO emissions shall be determined by multiplying the approved CO emission factor (0.023 lb/ODT) by the plant process rate.

Calculations and the facility-wide VOC and dryer CO emissions shall be recorded monthly in a log (written or electronic format).

Reporting

- d. The Permittee shall submit a semi-annual summary report, acceptable to the Regional Air Quality Supervisor, of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December, and July 30 of each calendar year for the preceding six-month period between January and June. The report shall contain the following:
 - i. The monthly hardwood/softwood mix for the previous 17 months.
 - ii. The 30 day rolling average product moisture content.
 - iii. The monthly VOC and CO emissions for the previous 17 months. The emissions must be calculated for each of the 12-month periods over the previous 17 months.

STATE-ONLY REQUIREMENT:

- 2. **TOXIC AIR POLLUTANT EMISSIONS LIMITATION AND REQUIREMENT** - Pursuant to 15A NCAC 02D .1100 and in accordance with the approved application for an air toxic compliance demonstration, the following permit limit shall not be exceeded:

| EMISSION SOURCE | TOXIC AIR POLLUTANTS | EMISSION LIMITS |
|-------------------------------------|----------------------|-----------------|
| Dryer system (ID No. ES-DRYER) | Acrolein | 2.93 lb/hr |
| | Formaldehyde | 6.65 lb/hr |
| Hammermill Filter #1 | Acrolein | 0.177 lb/hr |
| | Formaldehyde | 0.299 lb/hr |
| Hammermill Filter #2 | Acrolein | 0.177 lb/hr |
| | Formaldehyde | 0.299 lb/hr |
| Hammermill Filter #3 | Acrolein | 0.118 lb/hr |
| | Formaldehyde | 0.199 lb/hr |
| Pellet Cooler #1 Aspiration Stack | Acrolein | 0.149 lb/hr |
| | Formaldehyde | 0.0945 lb/hr |
| Pellet Cooler #2 Aspiration Stack | Acrolein | 0.149 lb/hr |
| | Formaldehyde | 0.0945 lb/hr |
| Pellet Cooler #3 Aspiration Stack | Acrolein | 0.149 lb/hr |
| | Formaldehyde | 0.0945 lb/hr |
| Pellet Cooler #4 Aspiration Stack | Acrolein | 0.149 lb/hr |
| | Formaldehyde | 0.0945 lb/hr |
| Pellet Cooler #5 Aspiration Stack | Acrolein | 0.149 lb/hr |
| | Formaldehyde | 0.0945 lb/hr |
| Pellet Cooler #6 Aspiration Stack | Acrolein | 0.149 lb/hr |
| | Formaldehyde | 0.0945 lb/hr |
| Emergency generator (ID No. IES-GN) | Acrolein | 2.27E-04 lb/hr |
| | Formaldehyde | 2.89E-03 lb/hr |
| Fire water pump (ID No. IES-FWP) | Acrolein | 1.94E-04 lb/hr |
| | Formaldehyde | 2.48E-03 lb/hr |

- a. No reporting is required.

STATE-ONLY REQUIREMENT:

- 3. **TOXIC AIR POLLUTANT EMISSION RATES REQUIRING A PERMIT** – Pursuant to 15A NCAC 02Q .0711, a permit to emit toxic air pollutants is required for any facility whose actual rate of emissions from all sources are greater than any one of the following rates:

| Pollutant (CAS Number) | Carcinogens (lb/yr) | Chronic Toxicants (lb/day) | Acute Systemic Toxicants (lb/hr) | Acute Irritants (lb/hr) |
|---|----------------------------|-----------------------------------|---|--------------------------------|
| 1,3-Butadiene (106-99-0) | 11 | | | |
| Acetaldehyde (75-07-0) | | | | 6.8 |
| Arsenic and compounds | 0.053 | | | |
| Benzene (71-43-2) | 8.1 | | | |
| Benzo(a)pyrene (50-32-8) | 2.2 | | | |
| Beryllium (7440-41-7) | 0.28 | | | |
| Cadmium (7440-43-9) | 0.37 | | | |
| Carbon tetrachloride (56-23-5) | 460 | | | |
| Chlorine (7782-50-5) | | 0.79 | | 0.23 |
| Chlorobenzene (108-90-7) | | 46 | | |
| Chloroform (67-66-3) | 290 | | | |
| Di(2-ethylhexyl)phthalate (117-81-7) | | 0.63 | | |
| Ethylene dichloride (107-06-2) | 260 | | | |
| Hexachlorodibenzo-p-dioxin (57653-85-7) | 0.0051 | | | |
| Hydrogen chloride (7647-01-0) | | | | 0.18 |
| Manganese & compounds | | 0.63 | | |
| Mercury | | 0.013 | | |
| Methyl chloroform (71-55-6) | | 250 | | |
| Methyl ethyl ketone (78-93-3) | | 78 | | |
| Methyl isobutyl ketone (108-10-1) | | 52 | | 7.6 |
| Methylene chloride (75-09-2) | 1600 | | 0.39 | |
| Nickel (7440-02-0) | | 0.13 | | |
| Pentachlorophenol (87-86-5) | | 0.063 | 0.0064 | |
| Perchloroethylene (127-18-4) | 13000 | | | |
| Phenol (108-95-2) | | | 0.24 | |
| Polychlorinated biphenyls (1336-36-3) | 5.6 | | | |
| Styrene (100-42-5) | | | 2.7 | |
| Tetrachlorodibenzo-p-dioxin (1746-01-6) | 0.00020 | | | |
| Trichloroethylene (79-01-6) | 4000 | | | |
| Toluene (108-88-3) | | 98 | | 14.4 |
| Trichlorofluoromethane (75-01-4) | | | 140 | |
| Vinyl chloride (75-01-4) | 26 | | | |
| Xylene (1330-20-7) | | 57 | | 16.4 |

SECTION 3 - GENERAL CONDITIONS

1. In accordance with G.S. 143-215.108(c)(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
Raleigh Regional Office
3800 Barrett Drive
Raleigh, NC 27609
919-791-4200

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 - In accordance with 15A NCAC 02D .0605, 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 02Q .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 - In accordance with 15A NCAC 02Q .0301, 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 - In accordance with 15A NCAC 02Q .0309, 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. In accordance with 15A NCAC 02Q .0309, 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. In accordance with G.S. 143-215.108(c)(1), 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.

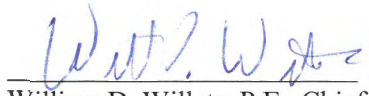
7. In accordance with G.S. 143-215.108(c)(1), this permit is nontransferable by the Permittee. Future owners and operators must obtain a new air permit from the DAQ.
8. In accordance with G.S. 143-215.108(c)(1), this issuance of this permit in no way absolves the Permittee of liability for any potential civil penalties which may be assessed for violations of State law which have occurred prior to the effective date of this permit.
9. In accordance with G.S. 143-215.108(c)(1), 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. In accordance with 15A NCAC 02D .0605, 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. In accordance with G.S. 143-215.108(c)(1), this permit does not relieve the Permittee of the responsibility of complying 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 - In accordance with 15A NCAC 02Q .0110, 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 02D .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 02D .2600 and follow all DAQ procedures including protocol approval, regional notification, report submittal, and test results approval.

Permit No. 10203R05

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Permit issued this the 3rd of March, 2017.

NORTH CAROLINA ENVIRONMENTAL MANAGEMENT COMMISSION

A handwritten signature in blue ink, appearing to read "W. D. Willets", is written over a horizontal line.

William D. Willets, P.E., Chief, Permitting Section

Division of Air Quality, NCDENR

By Authority of the Environmental Management Commission

Air Permit No. 10203R05

ATTACHMENT

List of Acronyms

| | |
|------------------------|--|
| AOS | Alternate Operating Scenario |
| BACT | Best Available Control Technology |
| Btu | British thermal unit |
| CAA | Clean Air Act |
| CAIR | Clean Air Interstate Rule |
| CEM | Continuous Emission Monitor |
| CFR | Code of Federal Regulations |
| DAQ | Division of Air Quality |
| DENR | Department of Environment and Natural Resources |
| EMC | Environmental Management Commission |
| EPA | Environmental Protection Agency |
| FR | Federal Register |
| GACT | Generally Available Control Technology |
| HAP | Hazardous Air Pollutant |
| MACT | Maximum Achievable Control Technology |
| NAA | Non-Attainment Area |
| NCAC | North Carolina Administrative Code |
| NCGS | North Carolina General Statutes |
| NESHAPS | National Emission Standards for Hazardous Air Pollutants |
| NO_x | Nitrogen Oxides |
| NSPS | New Source Performance Standard |
| OAH | Office of Administrative Hearings |
| PM | Particulate Matter |
| PM₁₀ | Particulate Matter with Nominal Aerodynamic Diameter of 10 Micrometers or Less |
| POS | Primary Operating Scenario |
| PSD | Prevention of Significant Deterioration |
| RACT | Reasonably Available Control Technology |
| SIC | Standard Industrial Classification |
| SIP | State Implementation Plan |
| SO₂ | Sulfur Dioxide |
| tpy | Tons Per Year |
| VOC | Volatile Organic Compound |